Electric Cars: What Early Adopters And First Followers Want

This report explores the preferences current electric car drivers and potential buyers have regarding electric car models, classes, special features, range, battery options, and more. It also takes a deep dive into key consumer benefits of electric cars and the best ways to promote broader electric car adoption.
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Surveys & Report Conducted By:

IMPORTANT MEDIA

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Introduction

The electric car market has been growing exponentially in the past few years. But it is still a small percentage of the new car market in most places, typically representing less than 1% of new car sales. What is needed to grow electric car sales to a majority of new car sales? What types of cars and what features will dominate in such a market? When will we reach that milestone?

“Early adopters” and “first followers” will lead us into an electric future, as they do with every technology transition. The sooner they get what they want, the sooner electric cars will become mainstream products that the majority of new car buyers are choosing. These early buyers illuminate broad consumer needs and desires that we often don’t consider simply by theorizing. Getting their feedback sooner rather than later can help companies and governments save time and money, while guiding them along the most effective path into the future.
Through four different surveys completed by over 2,000 people, we have gathered useful and unique insight into what existing and potential electric car owners and lessees want from their electric cars, charging infrastructure, and local policymakers. This report details the minimum electric driving range that people want from fully electric and plug-in hybrid electric cars, their range-price “sweet spot,” specific features they want or require in an electric car, their preferred car classes, and specific electric car models they intend to buy or lease. The report also delves into preferences regarding buying or leasing and how these options have been split amongst early adopters.

“Why wouldn’t you try to make the future better, if you are going to be a part of it.”
~Elon Musk

External to the cars, the report offers insight into electric car charging preferences and habits, solar power adoption, the attraction of different government incentives, and electric car business models that respondents think will most effectively advance the electric car revolution.

The report also explores what early adopters and first followers consider to be electric cars’ greatest benefits and attractions – matters which might help automakers, electric car advocates, and policymakers more effectively grow the electric car customer base.
The surveys conducted for this report also delve into more obscure but important matters, such as the ability to upgrade a car’s battery in future years, access to Supercharging, DC fast-charging capability, autonomous driving options, and over-the-air software updates, among other things. Demographics such as respondent gender, household income, number of cars in the household, and location also offer some interesting insights.

Wrapping up the report, we discuss a potential “EV revolution” – specifically, expectations for when electric cars will account for 10% and then 50% of new car sales, as well as a brief presentation on disruptive technologies and technology adoption curves.

Is the future electric? We think so. The only question is – how fast will we get there?
As with any study, this one includes a number of limitations. This report is based on responses to four surveys. The surveys were shared on websites widely read by EV enthusiasts, and respondents were not offered any rewards for participating (beyond being able to eventually see the results of the surveys). Naturally, that means that the results suffer from self-selection bias and the biases present in current EV enthusiasts and drivers. Many of the results would have been quite different if the surveys were completed by a broad, representative sample of Americans – or, more broadly, citizens of the world.

This was deliberate and also serves a purpose. I was curious to learn more about early EV adopters and a “second wave” of potential adopters, what some would call “first followers.” I was curious to find out what EV manufacturers, charging station companies, and policymakers could do to serve the needs and desires of these early adopters and first followers. I wanted to find out what people who were quite educated on the topic wanted, and what excited them.

I think these surveys resulted in many interesting findings, but it is definitely important to remember while reading this report that the respondents are not representative of the general public, and extrapolating the findings is thus dubious in many situations.
About The Respondents

One of the four surveys was directed only at current EV owners and lessees (also referred to “EV drivers” in parts of this report). Two of the four surveys were directed at both EV drivers and potential EV buyers. One survey was directed only at potential buyers yet to purchase or lease their first EV.

Across the board, the respondents from the two main surveys were heavily male and wealthy.

93.5% of EV drivers were male, and 90.5% of potential buyers were male.

58% of EV drivers indicated their annual household income was over $100,000, while 38% of potential owners/lessees indicated the same.

88.5% of EV drivers indicated that their annual household income was over $50,000, while 75% of potential owners/lessees indicated the same. Note that median household income in the US was $53,657 in 2014.

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1 https://www.census.gov/hhes/www/income/data/statemedian/
Respondents were primarily living in the United States, closely matching CleanTechnica, EV Obsession, and GAS2 readership. The figures were:

- **Owners/lessees:**
  - 75.4% live in the US;
  - 6.8% Canada;
  - 5.4% the UK;
  - 2.6% Australia.

- **Potential buyers:**
  - 62.5% live in the US;
  - 10.1% Canada;
  - 6.5% Australia;
  - 5.8% the UK.
Respondents were also primarily living in small towns and big cities (rather than medium-sized cities). The figures were:

- **Owners/lessees:**
  - 27.3% in cities with over 1 million inhabitants;
  - 29.4% in towns with under 50,000 inhabitants.

- **Potential buyers:**
  - 24.1% in cities with over 1 million inhabitants;
  - 27.6% in towns with under 50,000 inhabitants.
What size city or town do you live in?

Answered: 1,153   Skipped: 10

>1 million people: 24.1%
500,000 to 1 million people: 14.8%
250,000 to 500,000 people: 8.3%
100,000 to 250,000 people: 12.0%
50,000 to 100,000 people: 13.1%
<50,000 people: 27.6%
The EV drivers had primarily bought their EVs in just the last 3 years, which is what would be expected looking at overall historical EV sales data\(^2\). This is how our respondents broke down: 41.1% of EV drivers had their EV for under 1 year, another 20.6% for 1 year, another 24.2% for 2 years, and another 10.9% for 3 years. Only 6.4% had an EV for 4 years or more.

Somewhat surprisingly, 20.6% of respondents stated that they have only one car – seemingly indicating that having only an EV is already adequate for many individuals. 45.8% have 2 cars, and 33.6% have more than 2 cars.

Admittedly, we did not identify how these percentages were split between owners of plug-in hybrid electric cars (which essentially have no range limitations), Tesla owners (which typically don’t have notable

\(^2\) [http://evobsession.com/category/research/sales/](http://evobsession.com/category/research/sales/)
range limitations), and owners of fully electric non-Tesla cars (i.e., fully electric cars with under 100 miles of range on a full charge). In future surveys on this topic, responses should be segmented according to these distinctly different types of EVs.

Even more surprisingly than the point above, though, 76.4% of EV owner/lessee respondents said that they had a good buying experience, while 17% indicated “meh” and only 6.6% indicated not having a good buying experience.

Given the widespread criticism of conventional dealers when it comes to selling EVs, and a number of “horror stories” in that regard, I expected the responses to be much more negative.

Only 22.5% of respondents had a Tesla (a Model S or a Roadster), so that seems to indicate that 69.5% of non-Tesla buyers had a good buying experience (and that’s assuming that every single Tesla buyer had a good buying experience, which is probably not the case... but pretty close). Color me shocked.
Among the potential first-time EV buyers/lessees, 37% wouldn’t consider a PHEV or EREV. Among those who would consider a PHEV/EREV, 16% want a minimum of 50 miles of electric range, and 14% want a minimum of 60 miles of electric range.

52% of respondents intend to never buy or lease a PHEV/EREV. Of the remaining respondents, the breakdown as far as when they intend to get one is as follows:

- 23.2% within 1 year
- 18.5% within 2 years
- 18.3% within 3 years
- 7.8% within 4 years
- 18.6% within 5 years

So, 86.4% of remaining respondents plan to get one within 5 years.

Over 50% of potential first-time buyers plan to buy or lease a fully electric car within the next 3 years, with the general breakdown as follows:

- 16.5% within 1 year
- 17.9% within 2 years
- 21.5% within 3 years
- 7.5% within 4 years
- 16.5% within 5 years

So, 72% of remaining respondents plan to get a pure EV within 5 years.
As far as buying vs leasing, 71% of owners/lessees would buy rather than lease their next EV, while 69% of potential owners plan to only buy, 15% plan to only lease, and 15% plan to both buy and lease. Among existing EV drivers, 60% only bought their EVs, 34% only leased, and 5% did both.

Regarding buying new versus used, 65% of respondents plan to get a new EV, 22% plan to get a used EV, and 13% don’t know yet.
Beyond questions about their cars and potential cars, we asked respondents a few questions regarding energy efficiency and solar power. As expected, responses from EV drivers indicated that driving electric does improve ones efficiency.

Specifically, with regard to driving efficiency, we asked, “Does owning/leasing an EV make you drive more efficiently (not counting the efficiency boost you get simply from driving electric)?” 70% of respondents said that it does. 6% weren’t sure, and only 24% said, “No.”

**Does owning/leasing an EV make you drive more efficiently (not counting the efficiency boost you get simply from driving electric)?**

- **Yes:** 69.9%
- **No:** 24.0%
- **Not Sure:** 6.2%

Regarding energy conservation at home, we asked, “Does owning/leasing an EV make you conserve energy in your home more?” 41% of people responded, “Yes,” 17% “Not Sure,” and 42% “No.”
In terms of solar power, 37.5% of current EV drivers have home solar panels, while 21% of potential EV drivers have home solar panels. Clearly, these percentages are much higher than for the populace at large.
On to the cars…. Without surprise, current EV ownership matched historical EV sales fairly well – 33.9% had the Nissan LEAF, 21.4% the Tesla Model S, 16% the Chevy Volt, 6.5% the BMW i3, and then much smaller percentages had numerous other electric cars (note that I cut off the chart below because there were far too many models to show here).
Importantly, I think this indicates that the EV-driver respondents are quite representative of the broader EV consumer market, which bodes well for making broad generalizations from this report.

More interesting than the cars people currently have (which we already basically know anyway) were the electric cars people intended to buy and were most excited about. Naturally, these results weren't a huge surprise either, as there are just a few very exciting electric models publicly planned for market in the coming few years, but it was interesting to see how the preferences were split. Breaking out results for each model, here are the seven hottest electric vehicles:

Model 3

- 39% owners expect to buy next
- 55% of potential owners expect to buy
- 53% owners more excited about this than any other new/coming EV
- 56% of potential owners more excited about this than any other new/coming EV

Model X

- 12% owners expect to buy next
- 17% of potential owners expect to buy
- 13% owners more excited about this than any other new/coming EV
- 15% of potential owners more excited about this than any other new/coming EV

Model S

- 10% owners expect to buy next
- 20% of potential owners plan to buy

Chevy Volt (1.0 + 2.0)

- 7% owners expect to buy next
- 23% of potential owners expect to buy
• 5% owners more excited about Volt 2.0 than any other new/coming EV
• 5% of potential owners more excited about Volt 2.0 than any other new/coming EV

Chevy Bolt

• 6% owners expect to buy next
• 17% of potential owners expect to buy
• 8% owners more excited about this than any other new/coming EV
• 4% of potential owners more excited about this than any other new/coming EV

Nissan LEAF (1st-Gen)

• 6% owners expect to buy next
• 8% of potential owners plan to buy

Long-Range Nissan

• 5% owners expect to buy next
• 33% of potential owners expect to buy
• 10% owners more excited about this than any other new/coming EV
• 6% of potential owners more excited about this than any other new/coming EV

There are a few other long-range and competitively affordable electric cars tentatively planned for market, but their release dates are less certain, which likely caused them to rank lower.

However, another reason they don’t have as much buyer interest or enthusiasm may be due to Nissan, GM, and Tesla benefiting from “first-mover advantage.” The Nissan LEAF, Chevy Volt, and Tesla Model S were the first genuinely mass-market electric vehicles in the United States. Many more of them have been sold than any other electric car models. Early adopters as well as EV enthusiasts eager to join the EV movement seem to trust these companies and want to reward them for their leadership in this sector.
Which model electric vehicle(s) are you most likely to buy/lease? (More than one answer permitted. Don’t know? Take your best guess.)

Answered: 1,283  skipped: 0

- Tesla Model 3: 55.28%
- Nissan Leaf (2nd Gen): 32.75%
- Tesla Model S: 20.20%
- Chevy Volt (2nd Gen): 17.96%
- Tesla Model X: 17.37%
- Chevy Bolt: 17.29%
- VW e-Golf: 9.39%
- BMW i3: 9.31%
- Nissan Leaf (1st Gen): 7.90%
- Toyota Prius Plug-in Hybr...: 7.90%
- Kia Soul EV: 6.98%
- Other (please specify): 5.99%
- Ford Focus Electric: 5.49%
- Chevy Spark EV: 5.49%
- Chevy Volt (1st Gen): 4.66%
- Honda Fit EV: 3.91%
- Renault Zoe: 3.82%
- Toyota RAV4 EV: 3.66%
- Mitsubishi Outlander...: 3.66%
- Ford C. Max Energi: 3.33%
- Ford Fusion Energi: 3.33%
- VW Golf GTE: 3.33%
Which of these coming electric cars are you most excited about? (One answer only.)

Answered: 1,203   Skipped: 0

Tesla Model 3: 56.19%
Tesla Model X: 15.38%
Long-Range Fully Electric: 5.99%
Chevy Volt 2.0 (2016 Volt): 5.07%
Chevy Bolt: 4.41%
Long-Range Fully Electric: 2.83%
Next-Gen Tesla Roadster: 2.33%
Next-Gen Toyota Prius: 1.66%
Next-Gen Mitsubishi: 1.16%
Audi R8 e-Tron (Fully): 1.08%
Long-Range Fully Electric: 0.91%
Volvo XC90 T8 Plug-in Hybrid: 0.83%
VW Passat GTE Plug-in Hybrid: 0.75%

(Note that the four charts above and below have been trimmed on the bottom for readability in this report. Numerous other models were selected by small percentages of respondents.)
Which of these coming electric cars are you most excited about?

Answered: 1,072  Skipped: 0

- Tesla Model 3: 52.99%
- Tesla Model X: 13.25%
- Long-Range Fully Electric: 10.35%
- Chevy Bolt: 8.49%
- Chevy Volt 2.0 (2016 Volt): 4.94%
- Long-Range Fully Electric: 1.87%
- Next-Gen Mitsubishi: 1.87%
- Next-Gen Tesla Roadster: 1.77%
- Long-Range Fully Electric: 1.59%
- VW Passat GTE Plug-in Hybrid: 0.58%
- Audi Q6 e-Tron (Fully): 0.56%
- Volvo XC90 T8 Plug-in Hybrid: 0.47%
- BMW X5 eDrive Plug-in Hybrid: 0.37%
- Next-Gen Toyota Prius: 0.37%
- Mercedes-Benz E-Class Plug: 0.19%
- Mercedes-Benz C-Class Plug: 0.19%
- Audi Q7 Plug-in Hybrid: 0.09%
- Audi R8 e-Tron (Fully): 0.09%
Tesla clearly stands out, even above Nissan and GM, in consumer interest. I had a little fun with a couple of questions about the electric car company, and the results were impressive: 54.2% of EV owners/lessees self-identified as fanbois/fangurls (typically derogatory terms), and
28.6% said they were “perhaps” fanbois/fangurls. Interestingly, almost the exact same percentages came out of non-owner/lessee responses – 54.5% and 29.10%.

It’s unspecified why respondents were so enthusiastic about Tesla and its products, but there are several likely reasons. One is that Tesla is 100% focused on fully electric vehicles. Not only does it not produce fossil-fuel-gulping cars; it even stays away from fossil-fuel-sipping plug-in hybrids and extended-range electric vehicles. This, by itself, must endear it to EV enthusiasts.
The company, mostly via well known CEO and product architect Elon Musk, is passionate about combating climate change, air pollution, and oil dependency. This is important to many people, and we like Tesla more for its passion on this front.

Tesla has also demonstrated the ability and desire to produce extremely high-performance and innovative vehicles. The Tesla Model S has broken many auto industry records and turned the general concept of electric cars on its head. Additionally, Tesla is the only company with a super-fast charging network in place, a topic I’ll come back to later in the report.

Tesla has long held plans to release a long-range and affordable electric car. It is widely assumed that Tesla’s batteries come at a lower cost per kilowatt-hour than any other EV batteries on the market. Making that assumption, when Tesla does bring a mid-market car to production, many potential buyers believe they will be able to get “more car for the money” from Tesla than from any other automaker.

Given the reviews of the Tesla Model S and Model X, as well as Tesla’s Supercharger network, many EV enthusiasts are eagerly awaiting a Tesla model they can affordably get their hands on. Even those who have bought or plan to buy a higher-cost Model S or Model X are enthusiastic because the Model 3 will presumably bring long-range, fully electric transportation to millions of people – if all goes as planned. That would mark a huge step forward for the electric vehicle movement.

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4 http://cleantechnica.com/2016/01/09/1-2-3-3-electric-cars-top-consumer-reports-owner-satisfaction-survey/
Favorite Things About EVs, & How To Attract New Buyers

Before getting into the key features people want or even require in EV models, let’s skip and jump through some of the key reasons respondents are interested in EVs, as well as some of the ways greater interest in EVs could be inspired in the masses.

To kick things off, when asked, “What is your favorite thing about your electric vehicle(s)?,” current EV drivers answered with the following breakdown:

- Climate & air quality benefits (18%)
- Not supporting oil industry (16.6%)
- Instant torque / great acceleration (11.9%)
- Convenient home charging (10.6%)
- Can drive on sunshine (10%)
- Financial savings = (9.1%)
(Note that the large majority of the 108 “Other” responses indicated “all of the above.”)

This matches well the assumed profile of initial EV adopters. Many early adopters, aka “pioneers,” are attracted to EVs because they help to combat global warming, reduce pollution, and reduce our dependence on oil. However, right behind those are the two things that I see as being most critical to mass adoption of EVs.

Most of the population is simply not going to buy greener cars like electric cars unless they offer a much better owner experience or save them a lot of money. As I’ve written many times before, the two huge consumer benefits that I think will drive EV adoption, and that make this a disruptive technology, are instant torque (which means excellent acceleration from a complete stop) and the tremendous convenience of home charging. Not too far behind these are the large fuel and maintenance financial savings that typically come with EVs.

Regarding instant torque, this is what gives a low-cost, simple Chevy Spark EV more acceleration off the line than a Ferrari 458 Italia. This is what gives a former Camaro enthusiast and owner a more enjoyable driving experience in a Smart Electric Drive. Instant torque is a ton of fun, which one typically realizes right when they test drive their first EV. However, for those who don’t enjoy darting off the line, there’s still great benefit. Such acceleration makes it easier to turn or merge onto a highway, get into a roundabout, and sometimes get out of harm’s way. Anyone from a 17-year-old thrill seeker to a cautious grandma can appreciate this benefit.

Regarding the convenience of home charging, this is a point that seems to be lost on the mass media, but it certainly isn’t lost on anyone who

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5 [http://cleantechnica.com/2013/12/30/1-reason-electric-cars-can-dominate-car-market/](http://cleantechnica.com/2013/12/30/1-reason-electric-cars-can-dominate-car-market/)
has lived with an EV. Instead of having to spend many minutes, hours, days, or weeks (depending on the timeframe you are considering) finding a gas station, getting off the road, pulling up to the pump, getting out of the car, pumping the gas (in a smelly and unhealthy environment), paying for the gas, getting back in the car, and getting back on the road, an EV driver can typically spend just ~3 seconds plugging in their car when they get home and then another ~3 seconds unplugging it when they leave. You don’t have to wait around while your car charges – you just go inside and enjoy time with your family, eat dinner, relax on the couch, etc. You typically leave your house with a “full tank” (in actuality, a full battery, of course) when you leave in the morning, unless you determine that you don’t really need a full charge every day and charge less frequently or just charge to 80% or so.

This convenience is greatest when one has home charging, but even for many who don’t, workplace charging and destination charging can offer a similar convenience.

While most of the population still isn’t aware of these electric car benefits, owners are very well aware of them.

The respondents to our non-owner/lessee survey know a lot more about electric cars than most of the public, but there are still clear differences in what they identify as the key benefits of EVs. This may be due to lack of experience living with an EV, or it may be due to different priorities between early adopters and first followers. When asked to prioritize the same benefits that owners chose from, the ranking came out as follows:

- Climate & air quality benefits (6.49)
- Convenient home charging (5.65)
- Less maintenance (5.62)
- Financial savings (5.52)
- Not supporting oil industry (5.29)
- Instant torque (4.49)
- Quiet (4.14)
- Can drive on sunshine (3.95)
- Interesting “new” tech (3.87)
That covers what EV drives and people planning to buy or lease an EV see as the big benefits, but how should we convey those benefits to the broader population? What are the most effective approaches. And what are the big incentives that would get more people to adopt EVs?

Asking the owners/lessees, “What do you think is the best way to promote EVs and spread the EV revolution?,” their responses broke out like this:
• More abundant EV charging (24.4%)
• Test drive events (20.3%)
• Better financial incentives (19.3%)
• Better media coverage (17.7%)
• Electric car rentals (6.3%)
• Electric-only dealerships (5.3%)
• EV access to HOV lanes, bus lanes, and toll roads (for free) (3.9%)
• Electric carsharing (2.6%)

Asking potential owners/lessees to rank these same things, the results broke out as follows:
• Better financial incentives (6.68)
• More abundant charging (6.61)
• Test drive events (5.88)
• Better media coverage (5.57)
• Electric car rentals (5.18)
• EV access to HOV lanes, bus lanes, and toll roads (for free) (4.85)
• Electric carsharing (3.91)
• Electric buses (3.24)
• Electric-only dealerships (3.07)
As can be seen, the top three choices were the same for both groups, but in a different order. Better media coverage and electric car rentals came in fourth and fifth for both groups.

Asking the respondents about their own personal incentive preferences, the clear winner (from the options provided) was a straight $3,000 cash rebate. 37% of owners/lessees preferred this, and 44% of non-owners/lessees preferred it. Second was “free public charging,” which 27% of both groups preferred. Non-owners/lessees then heavily preferred “free home charging station (assuming you didn’t have one)” (25%) over access to HOV/bus lanes (7%) and free parking (4%). Owners/lessees slightly preferred access to HOV/bus lanes (12.4%) over a free home charging station (11.5%) but also had little interest in free parking (4%).

If you could have one of these incentives (and no others), which would you choose?

Answered: 1,066   Skipped: 6

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<th>Incentive</th>
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<td>$3,000 rebate</td>
<td>44.3%</td>
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<tr>
<td>Free public charging</td>
<td>27.5%</td>
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<td>Access to HOV and/or bus...</td>
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<td>Free home charging...</td>
<td>11.5%</td>
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<td>Free parking</td>
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So, it seems pretty clear that straight cash incentives and more public charging stations are heavily preferred methods for stimulating greater EV adoption, as well as simply having more electric car test drive events.

Why that third option is important comes back to what was discussed earlier regarding the fun of driving EVs and their better drive quality (which is quieter and smoother than in a gasoline-powered car). Other responses from EV owner/lessees reinforce this point. When asked to rank agreement with the statement, “People who drive my EV tend to love it,” after removing the respondents who said this was not applicable to them (presumably because no one else had driven their EVs), 72.5% strongly agreed, 21.8% moderately agreed, 5% were not sure, and 0.7% moderately disagreed. There’s potential respondent bias in these responses, but I think the fact that less than 1% disagreed with such a strong statement is very telling.
(Choose the most appropriate answer)
People who drive my EV tend to love it.

Answered: 1,072   Skipped: 0

- **Strongly Agree**: 67.7%
- **Moderately Agree**: 20.3%
- **Not Sure/Neutral**: 4.7%
- **Moderately Disagree**: 0.7%
- **Strongly Disagree**: 0.1%
- **N/A**: 6.6%
Let’s now take a look at what buyers are looking for in terms of features and vehicle classes.

We asked only the non-owners/lessees about required and desired features they want in an EV. In order of popularity, but removing one answer due to potential misunderstanding, these were the features most required by respondents (note that respondents were able to select multiple features). In order of popularity:

- Access to Tesla’s Supercharger network (or a comparable network... if one ever gets built) (54.1%)
- 5 seats (28.4%)
- All-wheel drive (27%)
- Towing capability (13.6%)
- A free car rental for up to 3 weeks a year, or free access to a carsharing service for up to $500 of use (12.6%)
- Sunroof (10%)

I also asked these people, “Which features would you love to have in an EV, and could make you select one model over another?” Again, multiple answers were permitted. The breakdown of preference for the potential extra features we listed is as follows:

- Access to Tesla’s Supercharger network (or a comparable network... if one ever gets built) (61.4%)
- Ability to check charging status on a smartphone app (57.4%)
- Over-the-air software updates (50.4%)
• Ability to preheat or pre-cool the car using a smartphone app (45.3%)
• Autonomous cruise control (where the car automatically adjusts its speed to match the vehicle in front of it) (44.2%)
• All-wheel drive (40.5%)
• Keyless start, stop, and entry (37.7%)
• A system that would allow you to send electricity from your battery back into the grid (for some extra cash from the utility, of course) (34%)
• 5+ seats (27.4%)
• Autosteer (25.9%)
• Automatic parking (where you can get out in front of your house, for example, and the car will drive into the garage and park) (23.7%)
• Auto parallel park (22.4%)
• Towing capability (19.9%)
• A free car rental for up to 3 weeks a year (19.1%)
• Sunroof (16.9%)
• Option to get leather seats (15%)
• Option to get non-leather seats (14.6%)
• Free access to a carsharing network for up to $500 in use (10.5%)

From both of the questions above, we can see that respondents greatly value and desire Tesla’s Supercharger network, or would value and desire a comparable super-fast charging network… except that no others exist.

Other top desires concern “smart” features that make driving and fixing the car more convenient and less stressful, such as the ability to check charging status on a smartphone app, the ability to preheat or pre-cool the car using a smartphone app, over-the-air software updates (again, only offered by Tesla at the moment), and autonomous cruise control.

Another thing that only Tesla offers is the option to upgrade the battery pack for more capacity after a few years (for a designated price). Such an option has been recommended by our readers numerous times, so I
was curious to see how important it was, in general, to respondents. 69% of potential owners indicated they would be significantly more attracted to a fully electric model if they would be able to upgrade the battery pack. Only 7% didn’t care about that.

In terms of a plug-in hybrid model, 34% stated they would be significantly more attracted to a model if they would be able to upgrade the battery pack. 40% didn’t care.

Aside from features, another critical aspect of a car for many consumers (other than the color) is the class or type of vehicle it is.
If you didn't have an EV and were looking to get one, which type of electric vehicle would you be most interested in?

Answered: 1,072  Skipped: 0

- Compact car (size = Ford...) 20.4%
- Intermediate-sized car (size... 32.9%
- Full size (size = Ford...) 17.4%
- SUV 18.8%
- Pickup truck 3.8%
- Sports car 5.4%
- Scooter or Motorcycle 1.1%

All else being more or less equal, which type of electric vehicle would you be most interested in?

Answered: 1,203  Skipped: 0

- Compact car (size = Ford...) 21.6%
- Intermediate-sized car (size... 26.8%
- Full size (size = Ford...) 18.6%
- SUV/crossover 24.2%
- Pickup truck 4.5%
- Sports car 3.3%
- Scooter or Motorcycle 1.0%
Only a handful of widely available electric cars are on the market, not even covering all classes of vehicle. If automakers want to lead the way in this market, they should know what class of car potential EV buyers most desire.

This is how things broke down according to the two populations we surveyed:

1. Intermediate (owners/lessees = 33% | non-owners/lessees = 27%)
2. SUV (owners/lessees = 19% | non-owners/lessees = 24%)
3. Compact (owners/lessees = 20% | non-owners/lessees = 22%)
4. Full Size (owners/lessees = 18% | non-owners/lessees = 19%)
5. Sports Car (owners/lessees = 5% | non-owners/lessees = 3%)
6. Pickup Truck (owners/lessees = 4% | non-owners/lessees = 5%)
7. Scooter/Motorcycle (owners/lessees = 1% | non-owners/lessees = 1%)

Interestingly, none of the genuinely mass-market EVs on the market today are in the intermediate class. The Nissan LEAF is in the compact class, the Chevy Volt is in the compact class, the BMW i3 is in the subcompact class, and the Tesla Model S in the full-size class. If you consider the Ford Fusion Energi a mass-market EV, it is in the intermediate/midsize class, but it’s debatable whether this is a mass-market EV or simply a compliance car, and it is heavily criticized by many EV enthusiasts for having only about 20 miles of electric driving range on a full charge.
Range, Range, Range

And what about range?

Range on a single charge is clearly one of the key issues with electric cars today. They have much less range than a typical gasoline car. However, approximately 99% of trips are under 50 miles in the US, which is much less than the range of all the electric cars on the market. If you look at total miles driven in a day, on average, Americans drive 70 or fewer miles on approximately 90% of days. That is still under the range of most fully electric cars on the market.

Nonetheless, range is one place where fully electric cars are disadvantaged compared to gasoline cars, and there is still a lot of consumer concern about the matter.

Trying to better understand how much range is actually required or desired by consumers, we asked a handful of range-related questions in our surveys. Importantly, it’s worth noting that there is a big gap in driving range between the 107-mile Nissan LEAF (which actually only had 84 miles of range at the time the surveys were primarily conducted) and the 230-mile Tesla Model S 70. Keep that gap in mind when looking at the responses below.

We asked respondents about their minimum required range in a fully electric car. Among non-owners, 45% responded that they needed 220 or more miles of range on a single charge. Today, that means that Tesla’s Model S and Model X are the only pure EVs they’d consider. Another 15% are fine with a pure EV with 100 miles of range or less. That leaves a

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gap where 40% of respondents need less range than a Tesla offers but more than all of the other pure EVs on the market.

How did that change when asking current EV drivers the same question? The results were similar. 50% responded that they needed 220 miles of range or more, while 19% stated that they needed 100 miles or less. That leaves 31% who think they need more range than a Nissan LEAF but not as much as a Tesla Model S or X.
Another important point, though, is that extra range doesn’t come free. It comes with quite a hefty increase in price. Just for the purpose of getting a better sense of people’s range desires relative to price sensitivity, we asked where the “sweet spot” was for respondents between extra range and extra price. The results showed a similar acceptance for lower-range EVs at “the right price.”

Among non-owners, 7% indicated 70 miles for $25,000 (similar to a base-level Nissan LEAF) and 16% indicated 100 miles for $30,000 (similar to the new 107-mile Nissan LEAF). 24% weren’t happy with any of the options and 15% stuck to 220 miles or over (for $50,000 and up). That left a large percentage of respondents who were interested in a
range-price tradeoff that is absolutely not present on the market. A strong 16% would like a 130-mile EV for $35,000, 12% would choose a 160-mile EV for $40,000, and 8% would choose a 190-mile EV for $45,000.

If a 70-mile fully electric car has a base price (before incentives) of $25,000, and, all things being equal, each additional 30 miles of range costs you $5,000, which of the following options hits the sweet spot for you?

Answered: 1,203  Skipped: 0
Among current EV drivers, the responses followed the same pattern. However, we didn’t provide the option to choose “none,” so it is hard to compare precisely. We still see very similar results, though. 7% again indicated 70 miles for $25,000, and 15% indicated 100 miles for $30,000. 29% indicated 220 miles or more. That left 49% interested in a range-price tradeoff that is not present on the market. 21% selected a 130-mile EV for $35,000, 19% selected a 160-mile EV for $40,000, and 10% selected a 190-mile EV for $45,000.

If a 70-mile fully electric car has a base price (before incentives) of $25,000, and, all things being equal, each additional 30 miles of range costs you $5,000, which of the following options hits the sweet spot for you?

Answered: 1,072   Skipped: 0
Coming back to the non-owner/lessees who weren’t satisfied with any of the options, 23% indicated they’d choose a conventional gasoline or hybrid car instead, 15% said they’d avoid cars altogether, 18% preferred getting a plug-in hybrid, 32% an extended-range electric car (the Chevy Volt is the only such vehicle on the market), and 12% an electric car with a range extender (the BMW i3 REx is the only such vehicle on the market).

I also asked respondents about the minimum range they’d accept in a plug-in hybrid or extended-range electric car. 36% of existing EV drivers chose 60 miles (the highest possible choice), 26% chose 50 miles, and 14% chose 40 miles.
Perhaps more interesting, this question hinted at the irrationality of many of our consumer preferences. The most popular choices were 60 miles, 50 miles, 40 miles, and 30 miles, with large drops halfway between each those options at 55 miles, 45 miles, and 35 miles. Clearly, people just favor multiples of 10.

Of the 1,072 respondents, 9% skipped this question, indicating that they would not consider purchasing a PHEV or EREV.

**If you would consider buying a plug-in hybrid or extended-range electric car, what’s the minimum all-electric range you would settle for?**

Answered: 977  Skipped: 95

- 10 miles: 0.4%
- 15 miles: 0.4%
- 20 miles: 2.8%
- 25 miles: 3.6%
- 30 miles: 7.9%
- 35 miles: 5.0%
- 40 miles: 14.2%
- 45 miles: 3.0%
- 50 miles: 26.0%
- 55 miles: 0.9%
- 60 miles: 35.8%
The results from non-EV drivers were a little bit different. 37% answered that they wouldn’t consider a PHEV/EREV. After that, responses were fairly similar, but the top choices were 50 miles, 60 miles, 30 miles, and 40 miles, respectively.
Charging Habits, Desires, & Areas of Opportunity

The other side of the range coin is charging. With inductive, wireless charging lining the highways, short range wouldn’t matter. With cars that have several hundred miles of range, destination charging is probably all you’d need. Of course, we’re currently somewhere in between these two extremes. Since we just discussed range, let’s tackle charging.

I’ve already covered charging in a few sections of this report, and I think it’s useful to recap the highlights in order to quickly show how charging is a double-edged sword for electric cars.

First of all, we found that convenient home charging was one of the key benefits of an EV lifestyle. It was the fourth most popular benefit of EVs according to EV drivers, with 11% choosing it as their favorite benefit. Non-EV owners/lessees put it as #2 overall, only trailing the climate and air quality benefits of EVs.

On the other hand, EV drivers put “more abundant EV charging” as the #1 way to promote EV adoption and advance the EV revolution (24.4% of respondents chose that option). Potential owners/lessees put that as the second-best solution, only behind “better financial incentives.”

When asked about the importance of Tesla’s Supercharger network (or some comparable super-fast charging network), 65% of potential owners indicated they would be significantly more attracted to a fully electric model if it had access to Tesla Superchargers or something
comparable. (Note that Tesla’s Superchargers charge a car about twice as fast as the next-fastest DC fast chargers on the market\(^10\).) Only 11% of respondents didn’t care about having access to such a network.

I also asked this question but in relation to a PHEV/EREV. As would be expected, the importance of access to Tesla’s Supercharger network or some comparable super-fast charging network was not so strong. However, some respondents still considered it a big deal. 22% of potential owners indicated they would be significantly more attracted to a PHEV/EREV model if it had access to Tesla Superchargers or something comparable. 26% stated they’d be slightly more attracted to such a model. 52% of respondents didn’t care about having access to such a network.

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\(^{10}\) [evobsession.com/electric-car-charging-101-types-of-charging-apps-more/](evobsession.com/electric-car-charging-101-types-of-charging-apps-more/)
In a separate survey for both EV drivers and potential EV drivers, 29% of respondents indicated that DC fast charging was a requirement for them to consider a fully electric car, 25% indicated that it was very important for them, and 27% indicated it was somewhat important for them. Only 12% indicated it was “quite unimportant” and 7% “not important at all” for them.

When asked about the importance of a 6.6 kW onboard charger over a 3.3 kW onboard charger, 32% considered a 6.6 kW onboard charger a requirement, 24% considered it “very important” for them, and 26% considered it “somewhat important” for them. Only 9% said it was “quite unimportant” and 9% not important at all.
The importance of a 10 kW or greater onboard charger over a 6.6 kW onboard charger was less important to people, with 11% considering it a requirement, 16% “very important,” 34% “somewhat important,” 17% “quite unimportant,” and 22% not at all important.
Probably critical to the responses, 85% of respondents in this charging-focused survey indicated they had a place at home where they could charge.

In yet another survey focused on charging, but only for EV drivers, 26% indicated that they frequently find that current charging infrastructure presents a limitation on where they might want to go with their EV. 29% indicated that it sometimes presented a problem, and 36% indicated “somewhat, but that’s only an issue on long trips.” Only 9% indicated that it never presented a limitation for them. Note that ~30% of respondents drove a PHEV/EREV and ~28% drove a Tesla, indicating that even for the most range-blessed EVs on the market, lack of charging infrastructure still presents limitations in the eyes of owners.

Importantly, the charging station market is still very diverse. This presents some challenges for EV drivers. I asked EV drivers which of eight EV charging websites/apps they had used to scout out EV charging stations. 74% had used PlugShare, 57% ChargePoint, 24% Blink, 14% EVgo, 6% Greenlots, 6% Sun Country Highway, 4%
Aerovironment, and 3% EV ChargeHub. Surprisingly, 17% hadn’t used any of them.

(If you are already an EV owner/lessee and live in North America, please answer this question. If you are not an owner/lessee or don’t live in North America, please skip it.) Which of these websites/apps have you used to scout out EV charging stations in your area or along routes you want to drive?

Answered: 316  Skipped: 485

- **PlugShare**: 74.1%
- **ChargePoint**: 56.6%
- **Greenlots**: 6.3%
- **Sun Country Highway**: 5.7%
- **Blink**: 23.7%
- **EVgo**: 14.2%
- **Aerovironment**: 4.4%
- **None of the above**: 17.1%

I also asked non-EV drivers this question, curious to see how aware they were of these services. A whopping 47% hadn’t used any of them. 36% had used PlugShare, 28% ChargePoint, 9% Blink, 6% EVgo, 5% EV ChargeHub, 5% Sun Country Highway, 2% Greenlots, and 2% Aerovironment.
Without a doubt, the charging industry needs to mature a lot in order to enable widespread adoption of EVs. It is at a very early stage of development. The industry also needs EV adoption to grow in order to enable financially sustainable business models. The electric car and EV charging markets are growing together (natch), and it will be interesting to see where things stand in 10 years.
EV Revolution?

Revolution, baby!

I’ve mentioned “EV revolution” a few times already in this report. What am I talking about? By “EV revolution,” I’m referring to EVs taking over the personal transportation market in a relatively short period of time, something which I’m convinced will happen due to the significant benefits of electric cars (eight of them, by my count). However, when that will really start to happen is very debatable, even among those who are convinced it is on the way. So, I posed a handful of questions to the respondents to crowdsource opinions on this matter.

The first such question on this matter was, “In which year do you think electric cars will make up at least 10% of US car sales in a single month?” 33% of EV drivers and 33% of non-EV drivers responded 2020. In second place, 13% of EV drivers and 17% of non-EV drivers chose 2018. In third place, 17% of EV drivers and 11% of non-EV drivers chose 2025+. In addition, significant percentages chose 2022 (11% and 9%), 2019 (9% and 11%), and 2017 (4% and 7%). In other words, responses were all over the place, but 83% of EV drivers and 89% of non-EV drivers see this happening within the next decade.

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The next question raised the bar quite a bit. It asked, “In which year do you think electric cars will make up at least 50% of US car sales in a single month?”

71% of EV drivers and 63% of non-EV drivers chose 2025+. Only 8% of EV drivers and 11% of non-EV drivers see this happening by 2020.

In other words, while these EV enthusiasts see strong electric car sales growth coming in the next few years, they think we are still at least a decade away from electric cars accounting for the majority of the new car market.

With Tesla Motors being the clear leader in the EV market from most angles, I also wanted to better understand how respondents felt about the company and how disruptive (economically speaking) they thought Tesla would be. The responses shocked me, even knowing that Tesla was a very popular company.

70% of EV drivers and 71% of non-EV drivers think Tesla will disrupt the auto industry, 16% and 18% are not sure, respectively, and 13% and 11% don’t think Tesla will disrupt the industry. On the whole, that’s a strong expectation that Tesla will really shake things up in one of the largest industries in the world.

Competitive advantages Tesla currently has over conventional automakers include the Supercharger network, lower battery prices, the under-construction Tesla Gigafactory (which will further reduce battery
prices), a reputation for high-performance and hi-tech cars, frequent over-the-air software updates to fix or improve cars, a sales and service-center system that trumps dealerships from the consumer perspective, and an undeniable “cool” factor. 

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http://evobsession.com/tesla-competitive-advantage-5-big-ones/
There’s still a lot of room for other EV pioneers like Nissan, GM, Mitsubishi, BMW, and Volkswagen to succeed in this realm, but many responses to this survey seem to indicate that the best way to do so is through association and partnership with Tesla.

Specifically, partnering on the Supercharger network and perhaps future battery production plans could be very helpful to these other automakers. And simply being “friends with” the “cool kid on the block” could open up more consumers to their brands. These are big decisions for the heads of large auto companies to consider, but if I were in their shoes, I believe I would be working feverishly to walk alongside Tesla and partner on critical pieces of the EV lifestyle – particularly, Supercharging capability and growth.

No matter what EV consumers buy, though, one thing is clear: they love driving electric. We asked the EV drivers, “Are you happy that you bought/leased your electric vehicle(s)?” 96% responded “Yes,” only 3% responded “Meh,” and only 1% responded “No.” See if you can find any other consumers so happy with their vehicles.

Also, just before this report was released, it was revealed in the latest Consumer Reports Annual Auto Survey that the three cars topping the list for owner satisfaction were electric cars – #1 Tesla Model S, #2 Chevy Volt, #3 Nissan LEAF. In other words, the owners of these electric cars are happier with their cars, on average, than the owners of all the gasoline and diesel models on the market. That’s pretty telling.

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13 [http://cleantechnica.com/2016/01/09/1-2-3-3-electric-cars-top-consumer-reports-owner-satisfaction-survey/]
And to reiterate a point made earlier, friends and family who drove their EVs seemed to love them as well. Under 1% disagreed with the statement, “People who drive my EV tend to love it,” and only moderately so.
Key Findings & Conclusions

If you did what I too often do and just skipped to the end of this report to check out the conclusions, I’ll quickly run through some of the key findings and implications for you (but I definitely encourage you to look through the entire report and at least scan the charts).

Early Adopters & First Followers

We are still at the baby stages of an electric car revolution. With electric cars accounting for just about 1% of new car sales, the buyers are generally stereotypical early adopters and people passionate about addressing global warming, air pollution, and oil dependency. They have higher incomes and much higher solar adoption rates than the general public.

These people are concerned about making buying decisions that benefit broader society, but they have also discovered that electric cars come with some huge consumer benefits that almost anyone can appreciate.

Instant Torque & Convenient Home Charging

For one, electric cars have instant torque that provides them with quick acceleration from a stop. This is a great deal of fun, and it also makes driving less stressful and safer, since it is easier to merge into moving traffic and get up to speed with other drivers, to cross lanes of moving traffic, and so on.
Secondly, charging is typically much more convenient than filling up a gas tank. It takes approximately 3 seconds to plug in and approximately 3 seconds to unplug. The rest of the time, you can be doing other things, like eating dinner, hanging out with your family or friends, relaxing on the couch, working, or basically anything you want to do. Approximately 85% of charging is done at home\textsuperscript{14}, but charging at work or key destinations can be just as convenient.

Electric cars also have much lower “fuel” costs per mile, have many fewer parts (so should also have less maintenance), and drive much more quietly and smoothly than conventional gasoline-powered or diesel-powered cars.

Financial Incentives, Charging Stations, & Better Consumer Exposure

Given these benefits, many respondents see test drives and simply better media coverage of EVs as keys to market growth. However, many respondents still ranked more EV charging facilities and better financial incentives as the most powerful ways to drive growth.

The EVs People Want

Concerning specific electric car models that EV-driving respondents had, the split was similar to the broader market. By far, the top three models were the Nissan LEAF, Tesla Model S, and Chevy Volt, respectively. The BMW i3 was a bit further behind, but still had a solid

\textsuperscript{14} \url{http://evobsession.com/chevy-volt-drivers-average-nearly-as-many-electric-miles-as-nissan-leaf-drivers/}
hold on the #4 spot. After that, no other models accounted for over 4% of respondents.

Moving from existing vehicles to EV models respondents planned to buy or lease, as well as announced or expected EV models respondents were most excited about, there was a strong preference for Teslas – the planned Model 3, the just-released Model X, and the well reviewed Model S. After Teslas, there was a continued preference for EVs from the companies that have led the market so far – the planned Chevy Bolt, the Chevy Volt (first generation and second generation), and the Nissan LEAF (first generation and second generation).

Key Features Buyers Require & Desire

Exploring specific features respondents were interested in, we learned that over half of respondents (54%) require access to Tesla’s Supercharger network or a comparable super-fast charging network (there is no such network in place or publicly announced) with any future electric model they buy. 28% require five seats, 27% require all-wheel drive, 14% require towing capacity, 13% require a free car rental for up to 3 weeks a year or free access to a carsharing service for up to $500 of use, and 10% require a sunroof.

Large percentages also indicated that the following features could trigger them to buy one model over another: access to Tesla Supercharger network (61%); apps to check charging status (57%) and preheat or pre-cool the car (45%); over-the-air software updates (50%), autonomous cruise control (44%); all-wheel drive (41%); keyless start, stop, and entry (38%); and a system to allow the owner to send electricity from the EV’s battery back into the grid, assuming the utility would pay for that (34%).
Certain autopilot features were popular with a smaller but still significant number of respondents: autosteer (26%), automatic parking, without a person present in the car (24%); and auto parallel park (22%).

Additionally, 69% of potential owners indicated they would be significantly more attracted to a fully electric model if they would be able to upgrade the battery pack. Only 7% didn’t care about that.

**Car Classes With Greatest Demand**

In terms of car classes, there was a clear preference for an EV in the intermediate class, which is interesting since there isn’t a mass-market EV in that class other than the Ford Fusion Energi, which only has ~20 miles of electric driving range.

Aside from the intermediate class, there’s also strong demand for the SUV, compact, and full-size classes. There’s much less demand for electric pickup trucks, sports cars, and scooters/motorcycles.

**Driving Range – What Consumers Will Accept**

There are only a few ways in which electric cars still trail gasoline-powered cars from a consumer perspective: range on a single charge, time needed to charge, and upfront cost (because of the large and expensive batteries in electric cars). There has long been a big range gap between ~80-mile electric cars from conventional automakers and >220-mile Tesla electric cars. 100 miles or fewer seems like not enough range for many buyers, but over 200 miles seems like overkill, given that we drive 70 miles or fewer on 90% of days, so I was curious to see what type of range requirements consumers actually had.
Among non-owners, 45% responded that they needed 220 or more miles of range on a single charge, and 15% indicated they needed no more than 100 miles of range, leaving a gap of 40% of respondents who need less range than a Tesla offers but more than all of the other pure EVs on the market.

Similarly, 50% of EV drivers indicated they needed 220 miles or more, 19% indicated they needed no more than 100 miles, and the remaining 31% were somewhere in between.

In other words, there’s a big market opportunity there for companies that fill the range gap between a 2016 Nissan LEAF and a Tesla Model S or Model X.

The Range–Price Tradeoff

Extra range isn’t free, though. Asking respondents to balance range needs and hypothetical prices, among non-owners, 7% indicated a sweet spot of 70 miles for a $25,000 car (similar to a base-level Nissan LEAF), 16% indicated 100 miles for $30,000 (similar to the new 107-mile Nissan LEAF), 16% chose a 130-mile EV for $35,000, 12% chose a 160-mile EV for $40,000, 8% chose a 190-mile EV for $45,000, 15% chose 220 miles or more for $50,000 and up, and 24% weren’t happy with any of the options. That leaves a big opening for moderately priced electric cars with 110 to 200 miles of range.

Asking EV drivers the same question, the responses were similar. 7% again indicated a preference for 70 miles of range for a $25,000 car, 15% indicated 100 miles for $30,000, 21% selected 130 miles for $35,000, 19% selected a 160-mile EV for $40,000, 10% selected a 190-mile EV for $45,000, and 29% chose 220 miles or more for $50,000 or more.

These results show that there is no electric car on the market serving the range-price “sweet spot” of nearly half the market. Clearly, there is a
large gap there that automakers should be working to fill. However, more research needs to be conducted on why automakers have kept away from this opening in the market.

Batteries of the Future

With battery technology improving fairly fast, respondents were eager to be given the option of upgrading the battery packs in their cars in the future, for a reasonable price. 69% of potential owners indicated they would be significantly more attracted to a fully electric model if they would be able to upgrade the battery pack. Only 7% didn’t care about that.

Fast Charging & Super-Fast Charging

Fast-charging capability was also critical to potential buyers. When asked about the importance of Tesla’s Supercharger network (or some comparable super-fast charging network), 65% of potential owners indicated they would be significantly more attracted to a fully electric model if it had access to Tesla Superchargers or something comparable.

In a separate survey for both EV drivers and potential EV drivers, 29% of respondents indicated that DC fast charging (which is about half as fast as Tesla Supercharging but several times faster than Level 2 charging\(^\text{15}\)) was a requirement for them to consider a fully electric car, 25% indicated that it was very important for them, and 27% indicated it was somewhat important for them. Only 12% indicated it was “quite unimportant” and 7% “not important at all” for them.

\(^\text{15}\) evobsession.com/electric-car-charging-101-types-of-charging-apps-more/
In general, all of these responses regarding fast charging indicate that the charging network and fast-charging (even super-fast-charging) capability are key components of an EV buyer’s purchasing decision.

Onboard Charger Preferences

Additionally, with regard to the onboard charger in an EV, most of the market now sees a 6.6 kW onboard charger as a critical component of the car, while they are much less convinced about the need for a 10 kW onboard charger. However, this may be due to lack of exposure to 10 kW or higher-capacity onboard chargers, and also long-range electric vehicles.

Electric Car Market Projections

When it comes to market growth, while most of the respondents see electric cars accounting for 10% of the new-car market by 2020, the majority don't expect electric cars to account for 50% of the new-car market until 2025 or later. Nonetheless, a large percentage (70-71%) think Tesla will disrupt the auto industry, another ~17% are not sure, and only ~12% don't think it will do so.

EV Driver Satisfaction Is High

Almost across the board, EV-driving respondents are happy they got their EVs. Granted, this survey was disseminated on EV websites, so was likely to attract EV enthusiasts – nonetheless, 96% of respondents said they were happy with the purchase/lease, and under 1% said they weren’t.
Perhaps more telling, 72.5% of respondents who didn’t indicate the following sentence didn’t apply to them strongly agreed with the statement, “People who drive my EV tend to love it.” 21.8% more moderately agreed, 5% were not sure, and only 0.7% moderately disagreed.

The Broad Picture

In conclusion, there are many features, car classes, and improvements to charging infrastructure and capability that auto manufacturers and EV charging companies could implement in order to serve consumer demand and grow the EV market. There are big gaps in the options on the market, and they are gaps consumers want filled. Nonetheless, current EV drivers are very happy with their cars and widely see their key benefits as stimulating demand. They see the future as electric, and they are bringing about that future now by living with EVs or by making plans to join the market.
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**Pono Home** is a turnkey home efficiency franchise and is committed to growing and supporting an army of sustainability champions that can green the world, one house at a time. **Pono Home**’s ~2 hour customized, comprehensive, and high-impact sustainability service covers a 200+ point checklist that makes homes more efficient, healthier, and more comfortable for homeowners and renters.

The evolution of Pono Home was borne from Founder and CEO Scott Cooney’s pragmatic approach to low-cost, high-return green initiatives he has taken both personally and professionally throughout his life, and through consistently underperforming sustainability initiatives where “convenience” didn’t enter the equation of planning committees. The combination of a relentless passion for sustainability and a practical business mind helped Cooney create Pono Home in 2014 as a solution to greening people’s homes across the world through a packaged offering of convenience and a high return on investment. Cooney has been a serial eco-entrepreneur since 2003, having started and grown five mission-driven companies.

Pono Home is a cohort company of the Energy Excelerator, a cleantech startup incubator with the mission to help wean Hawaii, and the world, off fossil fuels.
Pono Home is headquartered in Honolulu, Hawaii, and opened franchise sales in 30+ states across the US in 2015. The company has worked with commercial and residential customers, including homeowners, renters, hotels, hostels, small businesses, a military housing management company, and a public housing authority, and has contracts to green more than 12,000 military family and low-income family homes in Hawaii.