
Is There a Target Market for Electric Vehicles?

Millennials present the greatest opportunity, but Automakers will need to market to specific sub-segments in order to increase EV adoption, say Ipsos' John Kiser and Mark Essery.



POINT OF VIEW

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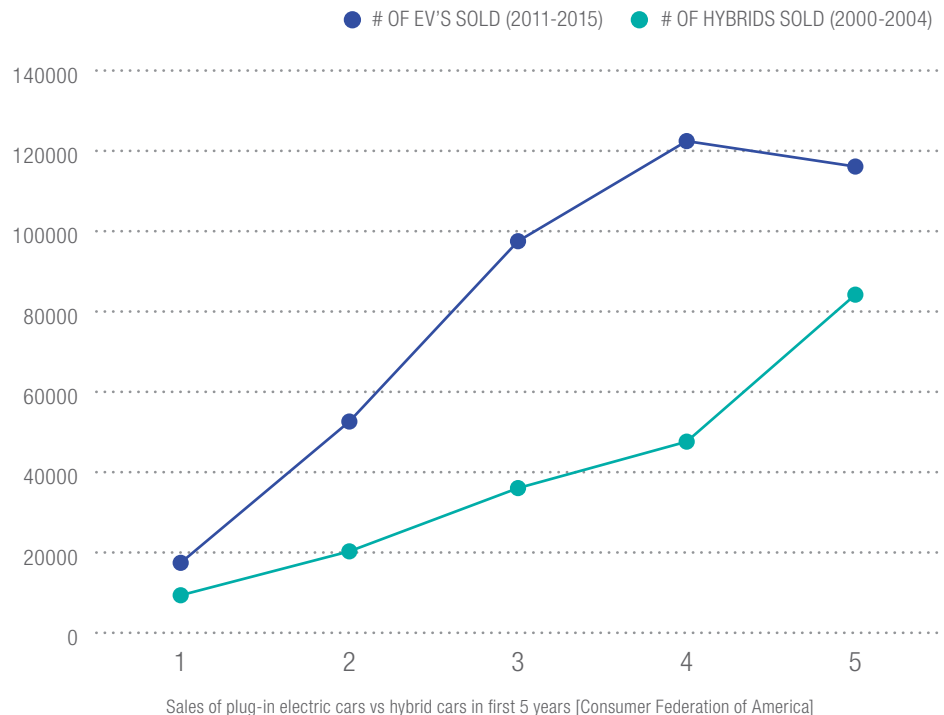
Our Point of View: While the adoption of Electric Vehicles has been slow to start, Ipsos research confirms that EVs represent a strong opportunity for OEMs, so long as they are marketed to specific sub-segments to maximize their appeal. Adoption among consumers can also be enhanced with advances in battery technology and expanded charging station infrastructure.

2016 marked the year of commitment from OEMs to the electric car. Major automotive brands such as Ford, General Motors and Volkswagen have announced plans to bring significant numbers of electric vehicles (EVs), either PHEV (Plug-in hybrid vehicles) or BEV (batter electric vehicles) to the market within the next 3-5 years. While this may be in part driven by CAFE (Corporate Average Fuel Economy) standards of 54.5 mpg on all vehicles by 2025, the major players are

nonetheless paying serious attention and backing it with serious dollars. The adoption of EVs has been slow, despite solid offerings such as Nissan's Leaf and the Tesla Model S. This is due to a number of mitigating factors, such as state regulations, lack of charging infrastructure, and consumer concern over range (range anxiety). However, EVs have been adopted in their first 5 years at higher rates than Hybrids were in their infancy.

EV (2011-2015) vs. Hybrid (2000-2004) Initial Popularity

(Percent Change
Over Previous Years)



Who is the target consumer for EVs? What are the levels of acceptance and adoption? Ipsos went under the hood to find out (actually, we plugged in).

General Market

- There are a reported 330,000 – 411,000 registered electric vehicles in the US since 2008.
- Currently, the US annual unit sales for BEV and PHEV vehicles should reach just under 130,000 units in 2016, which represents growth of about 11% from 2015 levels of 116,500 units.
- BEV is slightly more popular (54% of unit sales) as a category than PHEV (46%).

Expectations and Understanding of EV range

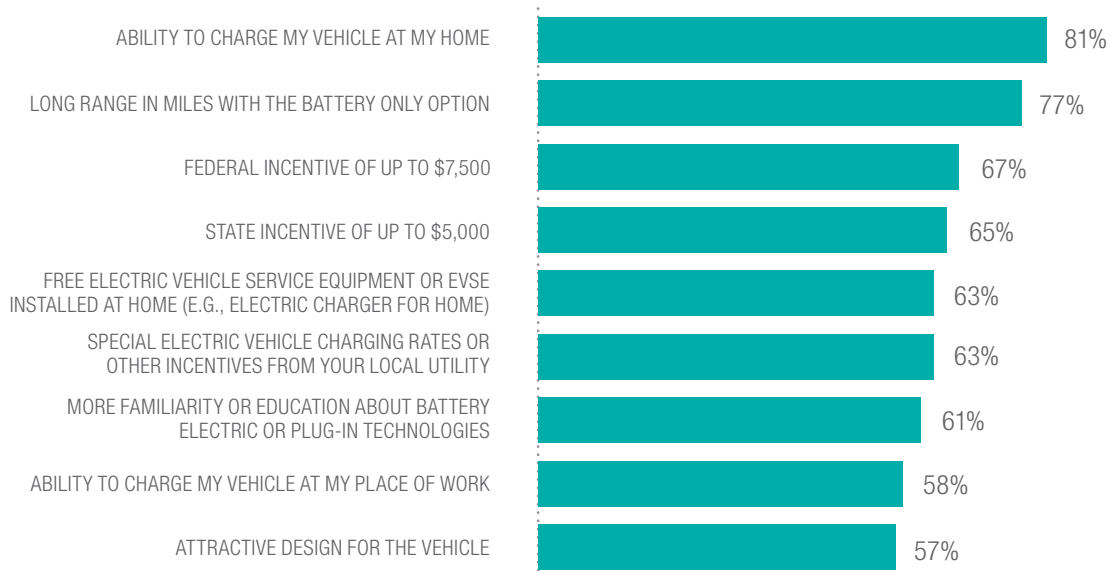
- On average, people expect to drive 180 miles on a charged battery – a distance only available in some select models.
- PHEV and BEV expectations for range were the same, suggesting a lack of clarity in the difference in power systems.

“Automakers can confidently target millennials, who have an early adoption attitude and broad tech knowledge”

Reduced Fuel Costs, Environmental Benefits Top Reasons for EV Adoption

- When asked which factors are important when purchasing, home charging (81%), long range on fully electric driving (77%) and tax incentives (67%) were most frequently cited.
- People also value design: more than half (57%) cited ‘attractive design for my vehicle’ as important.
- In California (home to almost half of EVs) access to commuter lanes as a single driver was also highly rated.

Importance of items when purchasing PHEV or BEV



(N=300), representative sample of 18 to 74 year olds across 10 ZEV states
Importance of those items that it would take to consider purchasing an alternative engine vehicle. 5-point scale, extremely important to not at all important. Top 2 box shown

Concept Evaluation

Ipsos tested concepts for two of the most anticipated EVs coming to market in order to understand consumer reaction, positioning optimization and target profile.

Chevrolet Bolt

- A subcompact BEV set for production in late 2016 for 2017 model year. Bolt is priced at \$37,500 to \$40,000, and EPA rated for 238-mile range.
- Design reviews call it an “urban runabout” that seems designed for taxi and ride share services. Its “high, boxy roofline for headroom and back seat comfort” and big rear doors, make it easy for backseat passengers to get in and out.

Tesla Model 3

- Tesla’s new BEV sports sedan, announced in March 2016, is expected to make deliveries in Q4 2017.
- Basic model priced at \$35,000, with driving range claims of 215 miles.
- Tesla reports 373,000 pre-orders (\$13.05 billion base sales potential) as of May 2016.

Ipsos Findings

Chevrolet Bolt

- The Chevrolet Bolt is an 'Underpriced' archetype according to the Key Measure Scorecard.
- The Bolt is seen to have high value because of its low price compared to what it claims its capabilities are.
- Uniqueness is very strong, indicating a strong word-of-mouth opportunity.
- Average believability and need fulfillment indicates it needs to make true on its claims to achieve major long term success.

Tesla Model 3

- Key measure scorecard reveals that the Tesla Model 3 falls in the 'Want' archetype.
- The Model 3 is well liked and has a strong purchase consideration, but need perceptions are not as strong.
- Uniqueness is high, indicating a strong word-of-mouth opportunity. When combined with strong marketing support, concepts like this can start to set a trend.
- However, the product will need to deliver upon the claims made about the concept.

(See Appendix for an overview of Vantis Archetypes)

Comparisons: Concept Intender – Demographics

When comparing the Chevrolet Bolt to the Tesla Model 3, the data shows interest is high among millennials. This target bodes well for producers of EVs as they are more in tune with tech and open to new products, and are of car buying age/income levels. Despite the age similarity, there are key differences among the target audience, with the Bolt skewing middle income and suburban, with a more even split among men and women than the Model 3.

Chevrolet Bolt

- Both male (52%) and female (48%)
- Millennials 18-34 (mean is 38.9)
- Slight skew on married (53%)
- Mean HHI is \$67,630
- Both urban (48%) and suburban (41%)

Tesla Model 3

- Skews male (65%)
- Millennials 18-34 (mean is 37.6)
- Heavy skew on married (71%)
- Mean HHI is \$102,040
- More urban (56%)

Comparisons: Concept Intender – Top Factors For PHEV/BEV Consideration

Considerations are similar across vehicles in that intenders are looking for a long driving range and the ability to charge at home. Bolt intenders place higher emphasis on financial incentives (federal and state) and being supplied with free charging equipment.

Chevrolet Bolt

- Federal Incentive of up to \$7,500
- State incentive of up to \$5,000
- Long range in miles with the battery only option
- Ability to charge my vehicle at home
- Free Electric Vehicle Service Equipment or EVSE installed at home

Tesla Model 3

- Federal Incentive of up to \$7,500
- State incentive of up to \$5,000
- Long range in miles with the battery only option
- Ability to charge my vehicle at home
- Ability to charge my vehicle at work

Comparison: Top 5 Phrases That Resonate Most With Respondents

Range and safety features are most important to both Bolt and Tesla intenders, although the speed of charge and ability to supercharge resonates highly for Tesla.

Chevrolet Bolt

- Estimated more than 200 miles of range per charge
- Safety: Forward Pedestrian Alert, Forward Collision Alert, Side Blind Zone Alert, and Rear Cross Traffic Alert
- Drive train: EV, 200 hp, 266 lb-ft torque, over 200 miles of pure electric range
- Alert Surround Vision: 4 cameras create a virtual bird's eye view
- 25 miles of range per hour of charge with 240-volt charger; Full charge in 9 hours

Tesla Model 3

- Achieves 215 miles of range per charge
- Model 3 is designed to attain the highest safety ratings in every category
- 80% charge in 40 minutes with Supercharger
- Supercharging capable

Summary

Ipsos considers the EV market a strong opportunity for OEMs. We forecast both the Chevrolet Bolt and Tesla Model 3 to be successful, but both brands will need to market to specific sub-segments to maximize their appeal.

Automakers can confidently target millennials, who have an early adoption attitude and broad tech knowledge. Adoption among consumers can be enhanced with advances in battery technology, which will result in increased range. Push for expanded infrastructure of charging stations and further explore the ability to charge faster at home.

Automakers should note, traditional features such as safety and design should not be overlooked. It is important that consumer target needs are understood: incentives are important to middle class buyers.

Stay tuned for future POVs on EVs by Ipsos, as we continue tracking this important sector.

About Vantis Archetypes

An Archetype is based on a survey score pattern that appears when the test offer is compared to the Vantis normative database. There are two dozen distinctive patterns, or Archetypes, across the Vantis Key Measures, and every new product offer can be classified into one of these patterns.

Archetypes are used to identify the market opportunity, as well as specific go-to-market challenges for the given offer. The Archetype helps to improve each concept and spot hidden winners that might otherwise be overlooked, such as breakthrough and niche opportunities with predictably low purchase intent scores.

Archetypes are a relatively new research concept, first developed by Vantis in 2007. An in-depth analysis of the Vantis Database revealed that many of the biggest market successes did not fit the traditional research definition of success, characterized by high purchase intent scores.



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About Ipsos

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