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## **Consumer Engagement Best Practices**

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### **Summary**

As more electric vehicle options become available and a wider audience of consumers is pursued, new methods for education, awareness, and marketing need to be employed. In order to attract the early majority market for plug-ins, strategies that may have worked with previous consumer bases need to be reconsidered and re-measured for their effectiveness. The emerging landscape of electric mobility also includes an increasing array of stakeholders that have a mutual interest in the success of EVs. This paper seeks to identify opportunities for collaboration and highlight emerging best practices for consumer engagement.

*Keywords: case study, education, market development, consumer engagement, best practices*

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### **1 Introduction**

Electric vehicles, EV charging, and the nuances around the best practices for driving and owning these modern vehicles can be a daunting set of topics. There is not one right way to grow awareness and educate on the subject of e-mobility, but there are emerging examples of campaigns that have worked for a number of audiences across North America.

### **2 The Language You Use**

Electric mobility can come with a dizzying amount of complexities when one considers the many details that can be considered by a driver. Terms such as CHAdeMO, J1772, and kWh are new and foreign to the majority of the public. While encouraging the transition to electric vehicles, well-meaning stakeholders often need to be reminded that over-complicating the topic can detract from the fact that plug-in vehicles are in a general sense simply better versions of existing automobiles.

Decision fatigue and the proposition of having to learn and relearn a complicated set of topics are significant obstacles. Put simply, if a potential consumer starts to think that transitioning to a plug-in vehicle will require learning complicated jargon and energy and engineering nuances related to their car, they may opt to stick with what they have. Cognitive resources are regularly depleted because we're fighting an uphill battle every day —

physically and mentally, at home and at work<sup>1</sup>. If we are seeking to move a larger audience of drivers to electric mobility, we need to make this transition very simple to comprehend while ensuring that the user has enough knowledge to make their experience a positive one.

One such example of this effort is Chargeway, a software platform, mobile app, and communication solution that simplifies the introduction of charging an electric vehicle by framing the discussion as “electricity as a fuel.” The Chargeway team will tell you that drivers are comfortable with their cars and filling up with regular, mid-grade, or premium at the gas-station with little regard to the octane numbers behind these grades. Similarly, the Chargeway system simplifies charging with a system of numbers and colors. Green, blue, or red colors correlate to the charging standard that a car relies upon. The numbers correlate to the speed and rate of kWh to charge for the EVSE. In this case, a “blue 4” would translate to a 50kW CHAdeMO charging standard.

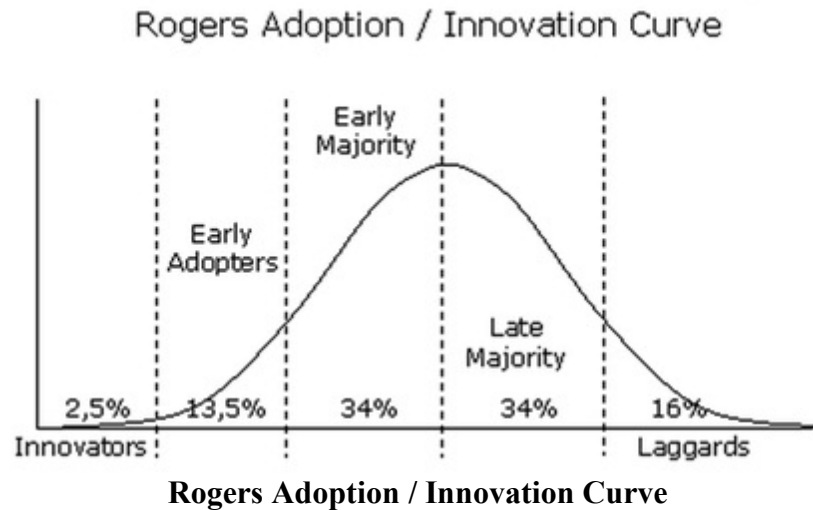


**Chargeway Beacon**

## 2.1 The challenge of attracting the early majority

<sup>1</sup> <https://buffer.com/resources/are-you-too-tired-to-make-good-decisions-the-rise-of-decision-fatigue>

A challenge to advancing electric vehicle implementation is that marketing and awareness lessons learned through early campaigns may not directly inform future campaigns. Research has shown that the drivers who chose to buy and drive electric vehicles first, the “innovators of adoption” and other early adopters, are typically highly educated, well-resourced men<sup>2</sup>. Consequently, in pursuing this target audience with a marketing campaign, one could position the vehicle as hi-tech, complicated, or even the best choice for the planet.



However, if we consider the target to be “early majority,” marketing needs to look at car sale demographics as a whole. Research has shown that the majority of new car buyers have an income of less than \$50,000, own a home, and depending on the vehicle class, generally tend to be in an older demographic<sup>3</sup>. If there is an effort that is seeking to move past the “early adopter” market and into the “early majority” market where a transition to plug-in vehicles becomes the norm, then lessons that attracted the earliest adopters may not apply. While it is inconclusive what approach may work best to attract new car buyers to plug-in vehicles en-masse there may be more lessons learned from traditional car buying sales and marketing programs than from historic electric vehicles marketing alone.

### 3 Best Practices from North American EV Education Campaigns

Many observers have noted that electric vehicles are not well marketed to consumers in the United States.<sup>4</sup> To the extent they are marketed at all, these campaigns have tended to focus on “early adopters” with messages that emphasize cool new technology and environmental benefits.

If we are going to reach 100% electrification of the vehicle fleet in coming years, we must move beyond the early adopters. Marketing that effectively makes the case for electric vehicles as better vehicles for a wider set of consumers will help drive increased sales overall.

Several organizations and programs have emerged and are going beyond marketing to early adopters.

<sup>2</sup> <https://www.sciencedirect.com/science/article/pii/S0965856414001463>

<sup>3</sup> <https://hedgescompany.com/blog/2019/01/new-car-buyer-demographics-2019/>

<sup>4</sup> <https://hedgescompany.com/blog/2019/01/new-car-buyer-demographics-2019/>

### **3.1 Forth NW EV Showcase Project**

The Pacific Northwest Electric Showcase<sup>5</sup> has emerged as a natural next step for Forth and its partners, building on its strong history of success in advancing electric vehicle deployment in the region. Forth, formerly known as Drive Oregon, is a nonprofit 501c6 trade organization with an affiliated 501c3, the Forth Mobility Fund.

As a leader in per-capita PEV sales, the Pacific Northwest is in a unique position to make the leap from early adopter, to early majority, toward the “tipping point” for PEVs. Since the Pacific Northwest is already starting at a higher level of PHEV registrations than other US regions<sup>6</sup>, we feel we can achieve greater penetration and provide a roadmap for others. We employ effective engagement tactics such as offering a safe place, free of a sales pitch, like the Go Forth Electric Vehicle Showcase for education, and mobile, pop up ride and drives throughout the region.

The goal of the Pacific Northwest Electric Showcase project is to transform the market from early adoption to early mainstream for PEVs in the Pacific Northwest, putting Oregon and Washington on a sustainable path to increase sales more than tenfold, to at least 15% of all new cars sold by 2025. The project’s interim goal is to at least double electric vehicle adoption rates by 2019, which translates into annual sales of 9,000 PEVs per year in Washington and 5,500 per year in Oregon, which also translates into total PEV sales of 33,000 in the two states over the funding’s three-year performance period.

Our market includes the cities of Portland, Oregon and Seattle, Washington. While the market similarities<sup>7</sup> of the two states can benefit from regional tactics of marketing and messaging, automakers treat these two states differently due to zero emission regulations. Oregon is a Zero Emission Vehicle (ZEV) state, having opted to be a part of California’s Zero Emission Vehicle Program, and receives new models of EVs before Washington does, as Washington is not a ZEV state.

While the variety and availability of electric vehicles continues to grow in many cities, it remains to be seen how we can move past the “early adopter” market and grow mainstream consumer appeal. Automakers and dealerships have their own strategies for developing the plug-in car segment, but must also market their (more common and more profitable) gas and diesel offerings. This co-marketing has led many to question the enthusiasm to sell a segment that has the potential to undercut more popular legacy offerings. In May 2014 Fiat Chrysler CEO Sergio Marchionne even went so far as to ask the public not to buy the Fiat 500E, saying that the company loses \$14k with each sale<sup>8</sup>. The Pacific Northwest Electric Showcase set out to promote plug-in vehicles to the public and educate and objectively stimulate electric vehicles sales and accelerate the buying process. The following narrative is a brief description of putting the Showcase together, and some of the lessons we have learned in the process.

#### **Go Forth Electric Vehicle Showcase**

##### **Putting the Showcase Together**

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<sup>5</sup> The Pacific Northwest Electric Showcase comprises the physical Go Forth Electric Vehicle Showcase also referred to as the ‘Showcase,’ the mobile pop-up ride and drive events that Forth organizes, and a regional marketing effort.

<sup>6</sup> <https://energy.gov/eere/vehicles/articles/fotw-1004-november-20-2017-california-had-highest-concentration-plug-vehicles>

<sup>7</sup> <https://www.cars.com/articles/carscom-lists-us-cities-with-greenest-car-shoppers-for-earth-day-1420683971827/>

<sup>8</sup> <https://www.reuters.com/article/chrsyeln-ceo-evs/fiat-chrysler-ceo-please-dont-buy-fiat-500e-electric-car-idUSL1N0071MS20140521>



Upon award of US Department of Energy (USDOE) funding, Forth began the search for a suitable place to house the physical Showcase. Portland General Electric (PGE) is a large utility in the Portland metro area and has been a supporter and member of Forth's Board of Directors since inception. PGE occupies most of the real estate in the Portland World Trade Center group of buildings, and had an open rental space available for use.

The location, 901 SW 1<sup>st</sup> Ave. is in the heart of downtown Portland, and with a high density of neighboring businesses, has very high visibility. Located on the ground level of a busy street corner, hundreds of pedestrians walk by the Showcase every day. Through Forth's relationship with PGE, we were also able to secure the location for a reduced rent price. The proximity to PGE and their commitment to EVs has also resulted in PGE holding monthly tours of the Showcase as part of the onboarding process for their new employees. The City of Portland has also provided free (and highly visible) on-street parking for Showcase vehicles directly in front of the location as an in-kind contribution.

Once the location was decided, Forth released a Request for Proposals to design and build the Showcase. Several prospective designers were given tours of the space including VizWorks who ultimately won the contract for the work. The request for proposals included a range of costs to be presented with a top-end of \$90,000.

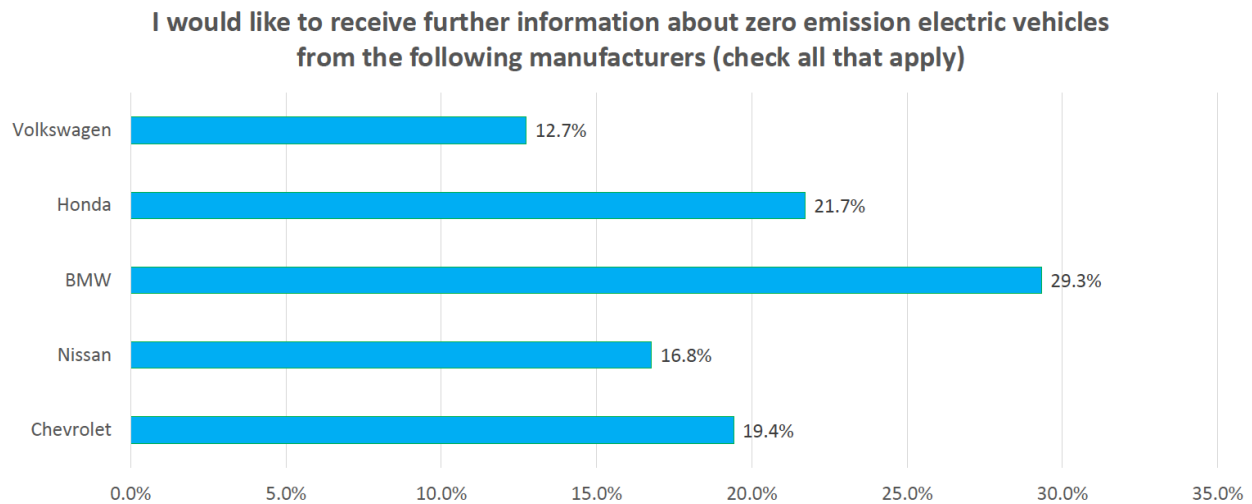
The marketing firm, Brink Communications, has a strong relationship with Forth and we felt confident that they could communicate our message while VizWorks could tackle the technical design and buildout of the space. Together with Brink, the Forth program managers worked to design the Showcase in a way that would inform visitors completely new to EVs yet provide further information to visitors who may already own one. Exhibits, descriptions and interactive displays were designed to have a museum quality appearance with user-friendly, hands-on operation. Definitions of the types of EVs are lettered in large script on the wall near the entrance, and a light-up display of an EV shows the inner workings of the battery and regenerative brakes.

### 3.2 Electrify America

Electrify America, a subsidiary organization of Volkswagen Group of America, established in 2017 to offset emissions associated with diesel emissions tampering has begun a significant campaign to grow consumer

electric vehicle awareness. The first foray into this effort was a series of electric vehicle ride and drives supported by Forth, and experiential marketing agency Gail & Rice throughout California. This Discover and Drive promotion utilized an intercept model to engage the public at a variety of venues encouraging consumers to try a free test drive of an electric vehicle of their choice.

Specific program elements included a mobile Electrify American EV Discovery Center that included example level-2 and fast charging stations, a multi-lingual engagement staff, and a specific focus to encourage low- and moderate-income communities to attend the events. Concluding in May 2018, surveyed attendees showed that they were more likely to consider an EV on a new or used basis in the future.

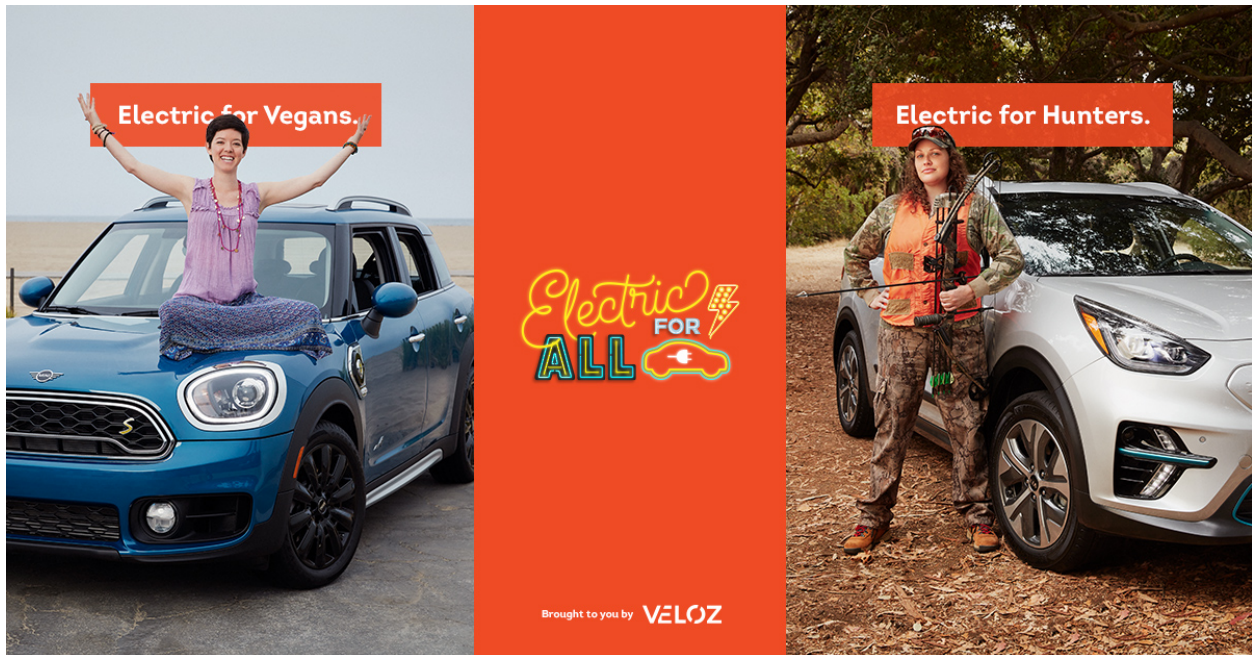


Electrify America has since launched their broader media campaign that is set to run through June 2019 as part of a TV, radio, and web effort. This campaign focuses on the positivity of EV awareness and availability of today’s plug-ins. The ‘Plug Into the Present’ catch phrase and corresponding website<sup>9</sup> further seeks to remove doubt for consumer interested in electric mobility.

### 3.3 Veloz

Veloz, a non-profit with relationships to the California Air Resources Board, auto makers, and the electric vehicle industry at large, has become the catalyst for advancing the adoption of electric vehicles throughout California. With an ‘Electric For All’ tagline, Veloz has positioned electric vehicles as a viable option for any driver regardless of background with a fun awareness campaign that uses juxtaposition and humour to get their message across. This campaign leverages a commitment of \$2 million USD in matching funds from Electrify America specifically aimed at the California buying audience<sup>10</sup>.

<sup>10</sup> [https://www.electricforall.org/sites/default/files/press-releases/veloz\\_pr\\_final\\_2.pdf](https://www.electricforall.org/sites/default/files/press-releases/veloz_pr_final_2.pdf)



**Veloz “Opposites Attract” social and digital campaign example.**

This campaign excels at making the cars, and electric mobility, seem fun and strives to include representation from a wide range of would-be consumers utilizing a variety of marketing channels including TV, radio, and digital and social media channels. This campaign drives the consumer to the [electricforall.org](http://electricforall.org) landing page where information about electric vehicles, rebates, and charging stations are available to click through and learn from. Notably, this campaign is focused on growing the awareness for electric vehicle incentives, and options that may fit the consumers need and not on ride and drives or other “high-touch” in-person interactions.

### 3.4 Emotive

The Emotive campaign is somewhat unique in approach to raising awareness for electric vehicle in and around British Columbia, Canada. Led collaboratively by Plug in BC, this initiative includes stakeholders from the provincial government, BC Hydro, Fraser Basin Council, academic institutions, and numerous other communities and businesses in the region.

This campaign focuses on the experience of driving an electric car and how this may relate to the outdoors and emotions that this generates for the user. Again, a fun silliness pervades the campaign with an emphasis on the cars being used in the outdoors or as a means to get to the outdoors. By focusing on the emotional value of the car and driver interaction this program overcomes the technology complexity burdens that often distract the target audience and goes directly for the reasons people want vehicles in the first place.

### Emotive example messaging



#### Set yourself free

Gliding through changing scenery while belting out your favourite tunes is even better in an EV.



#### Experience a better drive

With no gears, you'll enjoy instant acceleration for a fun and smooth ride. Yes—you just read instant acceleration.



#### Rediscover music

No gas engine means no noise, so you can enjoy music in a whole new way.



#### Befriend the planet

Doing good for the environment was never this easy. Or this fun.

## 4 Fostering Equity – Guarding Against an Equity Transportation Electrification Divide

As stated, earlier, electric vehicles, EV charging, and the nuances around the best practices for driving and owning these modern vehicles can be a daunting set of topics. There is not one right way to grow awareness and educate on the subject of e-mobility, but there are emerging examples of campaigns that have worked for a number of audiences across North America including low-to-moderate income communities, underserved communities and communities of color.

Electric and advanced mobility technologies will tend to flow first towards the most profitable applications, not necessarily toward the ones where they are most needed, will save the most energy, or yield the most utility system benefits. Low income and traditionally underserved communities tend to suffer the most from the health impacts of air pollution, as well as the economic impacts of limited mobility options. For most families and individuals, transportation is the second-highest expense for most households, second only to housing. For rural and low-income families, it is often the first. Furthermore, low income families tend to rely on older, less efficient vehicles, and often live further from job opportunities.

Low income consumers also face multiple barriers to adopting new technology, from limited access to credit, higher likelihood of living in apartments or remote locations where charging is difficult, and a lack of culturally appropriate marketing. A number of demonstration and pilot projects are beginning to bear fruit, such as Forth's Community Electric Vehicle pilot project in conjunction with Hacienda, LLC.

Many in the United States — especially those of low and moderate income — reside in apartments and often do not have dedicated parking spaces where they can charge electric vehicles. Government entities can partner with businesses, community organizations and utilities to provide matching funds to support the cost of charging stations for apartment housing and to provide educational outreach, technical assistance, and culturally sensitive based marketing.

Transportation electrification is also an opportunity for utility stakeholders to also engage with its customers to offer a new, exciting product line with economic and environmental benefits. Research shows that utility customers are expecting to hear more from their utility on issues and opportunities related to electric vehicles. A survey of consumers conducted by the Edison Electric Institute found that almost two-thirds of respondents wanted their electric utility to take a leadership role in encouraging a shift toward electric transportation<sup>11</sup>.

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<sup>11</sup> Edison Electric Institute (EEI). The Utility Guide to Plug-in Electric Vehicle Readiness. November, 2011. [https://www.eei.org/issuesandpolicy/electrictransportation/Documents/EVReadinessGuide\\_we\\_b\\_final.pdf](https://www.eei.org/issuesandpolicy/electrictransportation/Documents/EVReadinessGuide_we_b_final.pdf)



## 5 Conclusion

Consumers need credible and targeted information about electric vehicles and electric vehicle charging. Recent research shows that a high percentage of customers -- even in high penetration markets like California, Colorado, Georgia and Oregon in the United States -- are unaware of the growing number of EV makes and models or the increasing availability of public charging. Today, less than half of drivers even know that electric cars are an option. The language used can either confuse or enhance consumer understanding.

The examples of best practices from North American EV Education Campaigns is encouraging and highlights what strong public/private partnership can do, such as the NW EV Showcase Project. Electrify America and the Veloz consumer engagement campaigns, strive to demonstrate that EVs are viable and a fun option while the driver interaction need not be technologically complicated and that the experience can be rewarding, such as the Emotive campaign illustrates.

The United States will need to make stronger investments in consumer outreach to promote the benefits of electric vehicles. Over the coming years, we hope many more states in the United States decide to provide funds for rebates and educational outreach regarding the benefits of electric vehicles. This work is especially important in reaching lower income consumers and rural consumers and providing an opportunity to save money on their commute by going electric.

## Acknowledgments

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- <sup>3</sup> <https://hedgescompany.com/blog/2019/01/new-car-buyer-demographics-2019/>
- <sup>4</sup> See e.g. <https://www.fastcompany.com/90294305/car-companies-put-in-a-lot-of-work-to-not-sell-you-an-electric-car> and <https://content.sierraclub.org/creative-archive/sites/content.sierraclub>.
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## Authors



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