

Project Information Form

Project Title:	State of the Plug-In Electric Vehicle Market: Report I
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PI Contact Information:	Email: knkurani@ucdavis.edu
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Start and End Dates:	September 30, 2014 – June 30, 2017
Brief Description of Research Project:	<p>This is the first of two reports that gauges the extent to which car-owning households in California have considered purchasing plug-in hybrid electric vehicles (PHEVs), battery electric vehicles (BEVs), and fuel cell electric vehicles (FCEVs) (collectively, ZEVs). It explores which households have or have not considered ZEVs and, in those differences, seeks suggestions for how to promote greater consideration across an increased number and broader variety of households. The analysis is based on an on-line survey of car-owning households in California conducted in February 2017; the sample size was $n = 1,681$. The primary measure is the extent to which respondents have already considered a ZEV for their household: 4-of-5 car-owning households in California had given either no or nearly no consideration to ZEVs. Combined, less than 10 percent had given the highest two levels of consideration; active shopping or ownership. Other measures of awareness, name recognition, incentive knowledge, and driving experience were commensurately low. Relying on socio-economic and demographic variables to segment markets is unlikely to succeed. Variables describing respondents' decision contexts and resources are important, especially whether respondents can reliably access electricity at a home parking location. General attitudes regarding air quality, the relative public health and environmental effects of electricity vs. gasoline, and experience with HEVs add further explanatory power.</p> <p>Ultimately though, variables specific to ZEVs are more strongly associated with ZEV consideration: interest in ZEV technology; familiarity with ZEVs including name recognition, driving experience, and recognizing and recalling PEV charging, assessments of ZEV charging/fueling duration, driving range, purchase price, safety and reliability; and, whether people</p>



	<p>know a ZEV owner. The modeling done here is of differences between people at one point in time not of changes to people over time. Still, the suggestion is that to increase ZEV market growth it is essential to increase peoples' awareness and knowledge, providing them with the basis for informed assessments, and thus prompt serious consideration of ZEVs for their households. It should not be expected that all the people who have so far paid no or little attention will be quickly converted to ZEV shoppers and owners. However, there seems little prospect to grow the ZEV market unless the vast majority of car-owning households in California can be engaged in the transition to electric-drive.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented):</p> <p>Place any photos here</p>	
<p>Impacts/Benefits of Implementation (actual, not anticipated):</p>	
<p>Web Links</p> <ul style="list-style-type: none">• Reports• Project website	<p>https://ncst.ucdavis.edu/project/state-of-the-plug-in-electric-vehicle-market-report-1/</p> <p>https://escholarship.org/uc/item/4gn9x59z</p> <p><i>State of the Plug-In Electric Vehicle Market: Report II -</i></p> <p>https://ncst.ucdavis.edu/project/state-of-the-plug-in-electric-vehicle-market-report-2/</p>