

## Author's Accepted Manuscript

Designing policy incentives for cleaner technologies: lessons from California's plug-in electric vehicle rebate program

J.R. DeShazo, Tamara L. Sheldon, Richard T. Carson



[www.elsevier.com/locate/jeem](http://www.elsevier.com/locate/jeem)

PII: S0095-0696(17)30004-9  
DOI: <http://dx.doi.org/10.1016/j.jeem.2017.01.002>  
Reference: YJEEM1999

To appear in: *Journal of Environmental Economics and Management*

Received date: 31 March 2015

Cite this article as: J.R. DeShazo, Tamara L. Sheldon and Richard T. Carson Designing policy incentives for cleaner technologies: lessons from California's plug-in electric vehicle rebate program, *Journal of Environmental Economics and Management*, <http://dx.doi.org/10.1016/j.jeem.2017.01.002>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain

# Designing Policy Incentives for Cleaner Technologies: Lessons from California's Plug-in Electric Vehicle Rebate Program

J.R. DeShazo<sup>\*1</sup>, Tamara L. Sheldon<sup>†2</sup> and Richard T. Carson<sup>‡3</sup>

<sup>1</sup>Luskin School of Public Affairs, University of California, Los Angeles

<sup>2</sup>Department of Economics, University of South Carolina

<sup>3</sup>Department of Economics, University of California, San Diego

September 22, 2016

## Abstract

We assess the performance of alternative rebate designs for plug-in electric vehicles. Based on an innovative vehicle choice model, we simulate the performance of rebate designs that vary in terms of vehicle technologies, consumer income eligibility, and caps on the price of vehicles eligible for subsidies. We compare these alternatives in terms of 1) the number of additional plug-in electric vehicles purchased, 2) cost-effectiveness per additional vehicle purchase induced, 3) total program cost, and 4) the distribution of rebate funding across consumer income classes. Using the status quo rebate policy in California as a reference case, we identify two alternative types of designs that are superior along all four performance criteria.

---

\*deshazo@ucla.edu

†Tamara.Sheldon@moore.sc.edu

‡rcarson@ucsd.edu

<sup>1</sup>Corresponding author can be reached at (310) 593-1198.

<sup>2</sup>Funding for the UCLA New Car Buyers Survey was provided by the UCLA Luskin Center. Additional research funding for this analysis was provided by California Air Resources Board.

<sup>3</sup>The authors thank Severin Borenstein, William Chernicoff, Mary Evans, James Hamilton, Mark Jacobson, Matthew Kahn, James Sallee, David Victor, and Junjie Zhang for their helpful comments. The authors also thank C.C. Song and Samuel Krumholz for their research assistance.

Download English Version:

<https://daneshyari.com/en/article/5100394>

Download Persian Version:

<https://daneshyari.com/article/5100394>

[Daneshyari.com](https://daneshyari.com)