Electric Vehicle Rebates: Exploring Indicators of Impact in Four States

EV Roadmap 11, Portland OR, 20 June 2018
Brett Williams, Ph.D. – Principal Advisor, Clean Transportation
Michelle Jones and Georgina Arreola – Analysts

Thanks also to Jaclyn Vogel and others at CSE
Outline

• **Context: Programs and Data**
• **Program Impact:**
  – **Consumers Rebated**
  – **Behaviors Influenced**
  – **Market Implications**
• **Summary**

Extra Slides and Links
Context:
EV Rebate Programs and Data
## EV Incentive Programs: Rebate Design

<table>
<thead>
<tr>
<th>Category</th>
<th>Base Rebate</th>
<th>Additional Rebate</th>
<th>e-miles</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel-Cell EVs</strong></td>
<td>$5,000</td>
<td>$2,500</td>
<td>$5,000</td>
<td>e-miles 120, $2,000</td>
</tr>
<tr>
<td><strong>All-Battery EVs</strong></td>
<td>$2,500</td>
<td>$2,500</td>
<td>$2,000</td>
<td>e-miles 175, $3,000; e-miles 100, $2,000; e-miles &lt; 100, $500</td>
</tr>
<tr>
<td><strong>Plug-in Hybrid EVs</strong></td>
<td>$2,500 (i3 REx)</td>
<td>$2,500</td>
<td>$2,000</td>
<td>e-miles 10 kWh, $3,000; e-miles &lt; 10 kWh, $500腹&lt; 40, $2,000; e-miles &lt; 20, $500</td>
</tr>
<tr>
<td><strong>Zero-Emission Motorcycles</strong></td>
<td>$900</td>
<td>$750</td>
<td></td>
<td>e-miles ≥ 20 only; Consumer income cap and increased rebates</td>
</tr>
<tr>
<td><strong>MSRP $60k only</strong></td>
<td></td>
<td></td>
<td></td>
<td>MSRP ≥ $60k, only dealer assignment; $150 dealer incentive ($300 previous)</td>
</tr>
<tr>
<td><strong>MSRP &gt; $60k</strong></td>
<td></td>
<td></td>
<td></td>
<td>MSRP &gt; $60k, $500 max. point-of-sale</td>
</tr>
</tbody>
</table>
# Data Summary (Rebates to Individuals Only)

<table>
<thead>
<tr>
<th>Vehicle Purchase/Lease Dates</th>
<th>Total</th>
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<tbody>
<tr>
<td>Dec. 2010 – May 2017</td>
<td></td>
</tr>
<tr>
<td>July 2014 – October 2017</td>
<td></td>
</tr>
<tr>
<td>May 2015 – June 2017</td>
<td></td>
</tr>
<tr>
<td>March 2017 – Nov. 2017</td>
<td></td>
</tr>
<tr>
<td>Dec. 2010 – Nov. 2017</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Survey Responses (total n)*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>40,438</td>
<td></td>
</tr>
<tr>
<td>2,549</td>
<td></td>
</tr>
<tr>
<td>819</td>
<td></td>
</tr>
<tr>
<td>817</td>
<td></td>
</tr>
<tr>
<td>44,623</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Population (N)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>185,367</td>
<td></td>
</tr>
<tr>
<td>5,754</td>
<td></td>
</tr>
<tr>
<td>1,583</td>
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</tr>
<tr>
<td>3,937</td>
<td></td>
</tr>
<tr>
<td>196,641</td>
<td></td>
</tr>
</tbody>
</table>

* Weighted to represent the program population along the dimensions of vehicle category, vehicle model, buy vs. lease, and county (using raking method)
Consumers Rebated
Respondents by Household Income


44,623 total survey respondents weighted to represent 196,641 participants
* Personal correspondence, Prof. Bunch (UCD)
8
25%
43%
19%
13%
20%
41%
19%
31%
45%
14%
10%
39%
43%
12%
6%
7%
13%
20%
10%
6%
5%

Respondents by Household Income: Inappropriate Comparisons


44,623 total survey respondents weighted to represent 196,641 participants
* Personal correspondence, Prof. Bunch (UCD)
** U.S. Census Data
Majority Characteristics

44,623 total survey respondents weighted to represent 196,641 participants
California Household Travel Survey, 2012: weighted, n = 42,431.
Majority Characteristics: Trend

California Household Travel Survey, 2012: weighted, n = 42,431
Majority Characteristics: Trend

- Detached homes: 81% (2013-2015), 80% (2015-2016), 77% (2016-2017), 75% (Vehicle purchase “intenders”)
- 40-59 years old: 56% (2013-2015), 53% (2015-2016), 51% (2016-2017), 52% (Vehicle purchase “intenders”)

California Household Travel Survey, 2012: weighted, n = 42,431
Behaviors Influenced
Do EVs get used?

Replaced a vehicle with their rebated clean vehicle

- CVRP (2013–2017): 71%
- MOR-EV (2014–17): 76%
- CHEAPR (2015–17): 79%
- Drive Clean NY (2017): 81%

Datasets: 44,623 total survey respondents weighted to represent 196,641 participants
Do EVs get used?: Trend

Replaced a vehicle with their rebated EV

- 2013–2015: 65%
- 2015–2016: 76%
- 2016–2017: 78%

2015–2016 edition: weighted, n=11,583
2016–2017 edition: weighted, n=9,342
Do EVs get used?: by Tech Type

Replaced a vehicle with their rebated EV

Datasets: 44,623 total survey respondents weighted to represent 196,641 participants
What vehicles have rebates helped replace?

Datasets:

- MOR-EV (2014–17)
- CHEAPR (2015–17)
- Drive Clean NY (2017)

- 1999 or earlier
- 2000-2005
- 2006-2011
- 2012-2017

Datasets: 44,623 total survey respondents weighted to represent 196,641 participants
Market Implications
Rebate Influence: Importance

How important was the state rebate in making it possible for you to acquire your clean vehicle?

- CVRP (2013–2017): 90%
- MOR-EV (2014–17): 86%
- CHEAPR (2015–17): 96%
- Drive Clean NY (2017): 94%

Datasets: 44,623 total survey respondents weighted to represent 196,641 participants
Rebate Influence: Essentiality

Would **not** have purchased/leased their EV **without rebate**

Datasets: 44,623 total survey respondents weighted to represent 196,641 participants
Rebate Essentiality: Trend

Would **not** have purchased/leased their EV **without rebate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013–2015</td>
<td>46%</td>
</tr>
<tr>
<td>2015–2016</td>
<td>56%</td>
</tr>
<tr>
<td>2016–2017</td>
<td>58%</td>
</tr>
</tbody>
</table>

2016–2017 edition: weighted, n=9,261
Rebate essentiality is growing; phase-out appears premature

Rebate Essentiality

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
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<td>2015–2016</td>
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</tr>
<tr>
<td>2016–2017</td>
<td>58%</td>
</tr>
</tbody>
</table>

Common paradigm

Market Transformation

Percent of MOR-EV Respondents that are “Rebate Essential” by Base MSRP

As MSRP goes up, rebate influence diminishes

* $1,000 max rebate

<table>
<thead>
<tr>
<th>MSRP Range</th>
<th>Rebate Essential Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $30,000</td>
<td>47%</td>
</tr>
<tr>
<td>$30,000 – $39,999</td>
<td>50%</td>
</tr>
<tr>
<td>$40,000 – $49,999</td>
<td>44%</td>
</tr>
<tr>
<td>$50,000 – $59,999</td>
<td>35%</td>
</tr>
<tr>
<td>$60,000 – $69,999</td>
<td>30%</td>
</tr>
<tr>
<td>$70,000 – $79,999</td>
<td>21%</td>
</tr>
<tr>
<td>$80,000 or more</td>
<td>11%</td>
</tr>
</tbody>
</table>

* = small sample size (n < 30) in bin. MOR-EV Survey, 2014–17: n = 2,549 total respondents, weighted to represent N=5,754 participants
Rebate Essential Consumers are Different

- 2016 BECC talk
- 2017 TRR paper and TRB poster...

### Target Consumers: “Rebate Essentials”
- Consumers most influenced by the rebate:
  - Demographics: male, non-white, higher education, lower household income, perhaps younger and larger households
  - Motivations and interest: less motivated by environmental impacts, more motivated by saving money on fuel, carpool lane access, and perhaps energy independence; lower initial interest in EVs
  - Information gathering: found it more difficult to find info on EVs, spent more time researching online, learned about the rebate before going to the dealer
  - Vehicle characteristics: lower price, bought (vs. lease)

### Differences – PHEV Consumers
- The odds are higher for PHEV consumers that are younger, more motivated by energy independence and buying rather than leasing.

<table>
<thead>
<tr>
<th>PHEV Odds Ratio</th>
<th>BEV Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.38</td>
<td>1.18</td>
</tr>
<tr>
<td>1.25</td>
<td>1.23</td>
</tr>
<tr>
<td>1.08</td>
<td>1.11</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1.05</td>
<td>1.04</td>
</tr>
<tr>
<td>1.007</td>
<td>–</td>
</tr>
<tr>
<td>–</td>
<td>1.07</td>
</tr>
</tbody>
</table>

### Differences – BEV Consumers
- The odds are higher for BEV consumers in larger households and MUDs, with no solar or workplace charging, and living in central California.

<table>
<thead>
<tr>
<th>BEV Odds Ratio</th>
<th>PHEV Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.24</td>
<td>1.33</td>
</tr>
<tr>
<td>1.04</td>
<td>1.12</td>
</tr>
<tr>
<td>1.08</td>
<td>1.08</td>
</tr>
<tr>
<td>1.09</td>
<td>–</td>
</tr>
<tr>
<td>1.41</td>
<td>1.29</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Explanatory Variable
- Consumer demographics
  - Male
  - Non-white ethnicity
  - Graduate degree (vs. 2nd-highest: Bachelor’s)
  - Bachelor’s degree (vs. 2nd: some college or less)
  - Lower household income ($50k)
  - Younger (years)
  - More people in household (#)
- Housing and region
  - Multi-unit dwelling (vs. non-MUD)
  - No solar (vs. 2nd-highest: planning solar)
  - No workplace charging (vs. 2nd-highest: WPC)
  - Central CA (vs. 2nd-highest: Far South CA)
  - No workplace charging (vs. access to WPC)
  - Central CA (vs. 2nd-highest: South CA)
- Reasons and interest
  - More motivated by saving money on fuel
  - More motivated by carpool lane access
  - Less motivated by reducing environmental impacts
  - More motivated by energy independence
  - More motivated by vehicle performance
  - Lower initial interest in EVs
  - Rebate essential
- Information gathering
  - Found it more difficult to find information on EVs
  - Spent more time researching EVs online
  - Did not hear about the rebate from the dealer
- Transactional factors
  - Vehicle price is lower ($)
  - Buy (vs. lease)
  - Chevy PHEV (vs. 2nd-highest: Toyota)
  - Nissan BEV (vs. 2nd-highest: FIAT)
  - Ford (vs. 2nd-highest: other)
  - FIAT (vs. 2nd-highest: Nissan)
  - Acquisition date (days)

Source: [https://cleanvehiclerebate.org/eng/content/infographic-characterizing-california-electric-vehicle-consumer-segments-trb-poster](https://cleanvehiclerebate.org/eng/content/infographic-characterizing-california-electric-vehicle-consumer-segments-trb-poster)
Summary
Summary

• Some consumer differences, particularly gender, remain
  – Compared to new-car buyers, many differences may be smaller than expected
  – Trending in the right direction
• ~4/5ths of rebated EVs replace older, more polluting vehicles
  – PHEVs and other “uncompromised” vehicles replace vehicles at particularly high rate
  – ~1/2 of replaced vehicles are >5 years old
• Rebate rated moderately to extremely important to 9/10ths of rebated purchases/leases, essential to >1/2
• Indicators of impact are increasing over time
Thank You for Your Attention

What would you like to know more about?
What decisions are you facing?
brett.williams@energycenter.org

We work nationally in the clean energy industry and are always open to collaboration.
Extra Slides &
Additional Online Resources
## Majority Characteristics

<table>
<thead>
<tr>
<th></th>
<th>CA vehicle purchase/lease “intenders” (CHTS 2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>White/Caucasian</strong></td>
<td>76%</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td>49%</td>
</tr>
<tr>
<td>≥ Bachelor’s degree</td>
<td>66%</td>
</tr>
<tr>
<td>Detached homes</td>
<td>75%</td>
</tr>
<tr>
<td>40–59 years old</td>
<td>52%</td>
</tr>
</tbody>
</table>

44,623 total survey respondents weighted to represent 196,641 participants
California Household Travel Survey, 2012: weighted, n = 42,431.
## Majority Characteristics: Trend

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White/Caucasian</td>
<td>64%</td>
<td>65%</td>
<td>61%</td>
<td>76%</td>
</tr>
<tr>
<td>Male</td>
<td>75%</td>
<td>74%</td>
<td>72%</td>
<td>49%</td>
</tr>
<tr>
<td>≥ Bachelor’s degree</td>
<td>85%</td>
<td>83%</td>
<td>81%</td>
<td>66%</td>
</tr>
<tr>
<td>Detached homes</td>
<td>81%</td>
<td>80%</td>
<td>77%</td>
<td>75%</td>
</tr>
<tr>
<td>40–59 years old</td>
<td>56%</td>
<td>53%</td>
<td>51%</td>
<td>52%</td>
</tr>
</tbody>
</table>

Do EVs get used?

Replaced a vehicle with their rebated EV

<table>
<thead>
<tr>
<th>Year</th>
<th>Plug-in hybrid EVs</th>
<th>Battery EVs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013–2015</td>
<td>72%</td>
<td>59%</td>
</tr>
<tr>
<td>2015–2016</td>
<td>84%</td>
<td>71%</td>
</tr>
<tr>
<td>2016–2017</td>
<td>86%</td>
<td>73%</td>
</tr>
</tbody>
</table>

2015–2016 edition: weighted, n=11,583
2016–2017 edition: weighted, n=9,342
Do EVs get used?

Replaced a vehicle with their rebated EV

- Plug-in hybrid EVs (< 10 kWh): 76%
- Plug-in hybrid EVs (>= 10 kWh): 85%
- Battery EVs: 72%

2014 - 2017

MOR-EV Survey, 2014–17: n = 2,549 total respondents, weighted to represent N=5,754 participants
Do EVs get used?

Replaced a vehicle with their rebated EV

- **BEVs with range >190 miles**: 85%
- **Fuel Cell EVs**: 80%

How important was the State Rebate (MOR-EV) in making it possible for you to acquire your clean vehicle?

- Not at all important: 4%
- Only slightly important: 10%
- Moderately important: 19%
- Very important: 27%
- Extremely important: 41%

“Rebate Important” = 86%

MOR-EV Survey, 2014–17: n = 2,549 total respondents, weighted to represent N=5,754 participants
How important was the state rebate in making it possible for you to acquire your clean vehicle?

Datasets: 44,623 total survey respondents weighted to represent 196,641 participants

--- | --- | --- | ---
90% | 86% | 96% | 94%
16% | 19% | 10% | 15%
28% | 27% | 23% | 26%
46% | 41% | 63% | 53%
Rebate importance is lower for consumers of expensive vehicles

Importance of the rebate in making it possible to acquire a PEV.

From CSE’s Yale webinar, “Supporting EV Commercialization with Rebates”
Rebate Importance by Vehicle Price

MOR-EV Survey, 2014–17: n = 2,549 total respondents weighted to represent N = 5,754 participants
Getting the most out of stated-preference data

- “Importance” can be a useful indicator
  - High response rate
- But it is difficult to define and encapsulates a complex array of factors
- If seeking an even more conservative metric...
  - Difficult to avoid truthfulness bias in stated-preference data, but do have a metric that is:
    - Even less subject to recall bias
    - More clear cut
    - More “counterfactual”...

Rebate Essentiality
<table>
<thead>
<tr>
<th>Author/Year</th>
<th>Variables Examined</th>
<th>Effect/Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sierzchula et al. (2014)</strong></td>
<td>Country financial incentives – Global PEV market share</td>
<td>+ **</td>
</tr>
<tr>
<td>Jin et al. (2014)</td>
<td>Monetized non-financial BEV incentives – BEV sales</td>
<td>+ **</td>
</tr>
<tr>
<td></td>
<td>BEV financial subsidies – BEV sales</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Monetized non-financial PHEV incentives – PHEV sales</td>
<td>Not significant</td>
</tr>
<tr>
<td>DeShazo et al. (2014)</td>
<td>CA state rebate design – PEV sales</td>
<td>+</td>
</tr>
<tr>
<td>Narassimhan &amp; Johnson (2014)</td>
<td>Purchase rebate – BEV registrations</td>
<td>+ *</td>
</tr>
<tr>
<td></td>
<td>Purchase rebate - PHEV registrations</td>
<td>Not significant</td>
</tr>
<tr>
<td>Lutsey et al. (2015)</td>
<td>Monetized BEV benefits - BEV share</td>
<td>+ **</td>
</tr>
<tr>
<td></td>
<td>Monetized PHEV benefits - PHEV share</td>
<td>Not significant</td>
</tr>
<tr>
<td>Clinton et al. (2015)</td>
<td>State rebate - BEV sales (Tesla &amp; LEAF)</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>State rebate - BEV sales (LEAF)</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>State rebate - BEV sales (Tesla Only)</td>
<td>- **</td>
</tr>
<tr>
<td>Zhou et al. (2016)</td>
<td>Purchase incentives - BEV: Total Market</td>
<td>+ **</td>
</tr>
<tr>
<td></td>
<td>Purchase incentives - BEV: Mass Market (&lt;$40,000)</td>
<td>+ **</td>
</tr>
<tr>
<td></td>
<td>Purchase incentives - BEV: Mid Market ($40-50,000)</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>Purchase incentives - BEV: Luxury (&gt;60,000)</td>
<td>- **</td>
</tr>
<tr>
<td></td>
<td>Purchase incentives - PHEV: Total Market</td>
<td>+ **</td>
</tr>
<tr>
<td></td>
<td>Purchase incentives - PHEV: Mass Market (&lt;$40,000)</td>
<td>+ **</td>
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<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>Purchase incentives - PHEV: Luxury (&gt;60,000)</td>
<td>Not significant</td>
</tr>
<tr>
<td>Lutsey et al. (2016)</td>
<td>State incentive (top 50 MSA) - BEV vehicle shares</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>State incentive (top 50 MSA) - PHEV vehicle shares</td>
<td>+ **</td>
</tr>
<tr>
<td></td>
<td>State incentive (top 50 MSA) - PEV vehicle shares</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>State incentive (top 200 MSA) - BEV vehicle shares</td>
<td>+ **</td>
</tr>
<tr>
<td></td>
<td>State incentive (top 200 MSA) - PHEV vehicle shares</td>
<td>+ **</td>
</tr>
<tr>
<td></td>
<td>State incentive (top 200 MSA) - PEV vehicle shares</td>
<td>+ **</td>
</tr>
<tr>
<td>Jenn et al. (2017)</td>
<td>Individual credit (rebate or tax credit) - EV registrations</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>Individual credit (rebate or tax credit) w/knowledge of incentives - EV registrations</td>
<td>+ **</td>
</tr>
</tbody>
</table>
External vs. Internal Perspectives on Rebate Impact

U.S.: Rebate Impact on Non-Tesla Battery EV Sales (Clinton et al. 2015)

18%
External vs. Internal Perspectives on Rebate Impact

- U.S.: Rebate Impact on Non-Tesla Battery EV Sales (Clinton et al. 2015)
- CA: Rebate Essentiality for Non-Tesla Battery EVs (CVRP 2016–2017)

Why are added vehicle volumes important?

Volume is a proxy for a variety of market benefits, e.g.:

- **For producers**
  - Economies of scale
  - OEM learning-by-doing
  - Supply-chain creation

- **For dealers**
  - Salesperson familiarity
  - Supply on the lot

- **For consumers**
  - Consumer awareness and understanding
    - Parking lots as “second showrooms”
  - Information spillovers
  - Consumer learning-by-doing
    - Charging confidence
  - Adoption network effects

- **For society**
  - Use potential
    - Positive environmental externalities
Status: Massachusetts  (thru Feb. 2018)

Total Sales by ATV Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEV</td>
<td>5,597</td>
</tr>
<tr>
<td>PHEV</td>
<td>8,865</td>
</tr>
<tr>
<td>All</td>
<td>14,462</td>
</tr>
</tbody>
</table>

Monthly Sales by ATV Category

Top States by ATV Market Share

- California: 3.05%
- Washington: 2.00%
- Oregon: 1.85%
- Hawaii: 1.70%
- Vermont: 1.19%
- Georgia: 1.17%
- District of Columbia: 1.00%
- Colorado: 0.20%
- Connecticut: 0.82%
- Massachusetts: 0.75%
- Utah: 0.73%
- Maryland: 0.66%

https://autoalliance.org/energy-environment/zev-sales-dashboard/
How can consumer research help us grow markets for electric vehicles?

- **Disadvantaged Communities**
  - [AEA pres 2016](https://example.com/aea-pres-2016)
  - [CVRP DAC infographic, 2017](https://example.com/cvrp-dac-infographic-2017)

- **Information Channels**
  - [EV Roadmap pres, 2016](https://example.com/ev-roadmap-pres-2016)

- **Target Segments**
  - [TRR 2016 research paper](https://example.com/trr-2016-research-paper)
  - [AEA 2016 pres](https://example.com/aea-pres-2016)
  - [TRB 2017 poster](https://example.com/trb-2017-poster)
Additional Participant Evaluation Examples

- **Progress in Disadvantaged Communities** *(AEA pres 2016)*
- **Information Channels** *(EV Roadmap pres, 2016)*
  - Exposure & importance of various channels, consumer time spent researching various topics
- **Infographics**
  - Overall *(CVRP infographic, 2016)*
  - Disadvantaged Communities *(CVRP DAC infographic, 2017)*
- **Characterization of Participating Vehicles and Consumers** *(CVRP research workshop pres, 2015)*
- **Program Participation** by Vehicle Type and County *(CVRP brief 2015)*
- **Dealer services**: Importance and Prevalence *(EF pres 2015)*

[http://energycenter.org/resources?combine=&resource=All&technology=248&target=All](http://energycenter.org/resources?combine=&resource=All&technology=248&target=All)
Where can I get additional data?: Transparency Tools

Public dashboards facilitate informed action
- >240,000 EVs and consumers
- >19,000 survey responses statistically represent >91,000 consumers
- >$525M in rebates processed

- cleanvehiclerebate.org
- ct.gov/deep
- sonomacleanpower.org
- mor-ev.org
- zevfacts.com
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ct.gov/deep
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nyserda.ny.gov/All-Programs/Programs/Drive-Clean-Rebate/Rebate-Data