

# Utility Business Opportunities Related to Plug-in Electric Vehicle Adoption

Bryan Jungers  
February 6, 2012

[bryan\\_jungers@esource.com](mailto:bryan_jungers@esource.com) | | 303.345.9191



# Will This Wave Be Different?



Source: Wikimedia Commons

# Customer Preferences



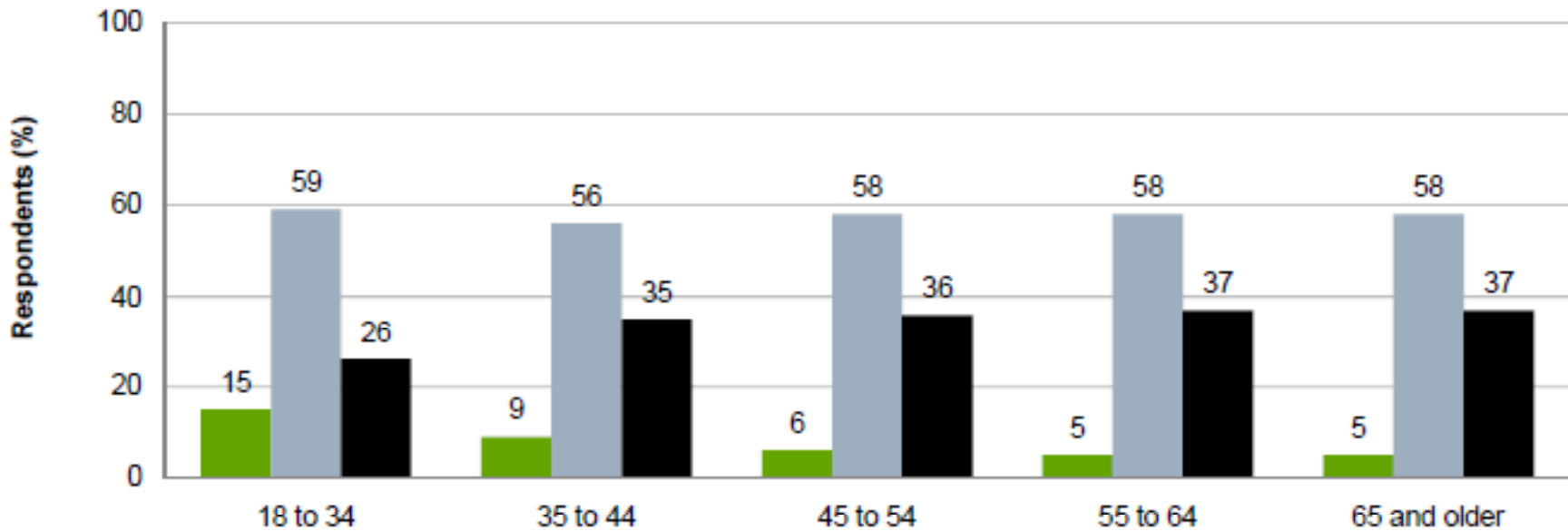
■ Plug-in all-electric vehicle



■ Plug-in hybrid (electric/gasoline) vehicle



■ Unsure/don't know



Question text: If you were going to buy one of these new vehicles, which one would you prefer?

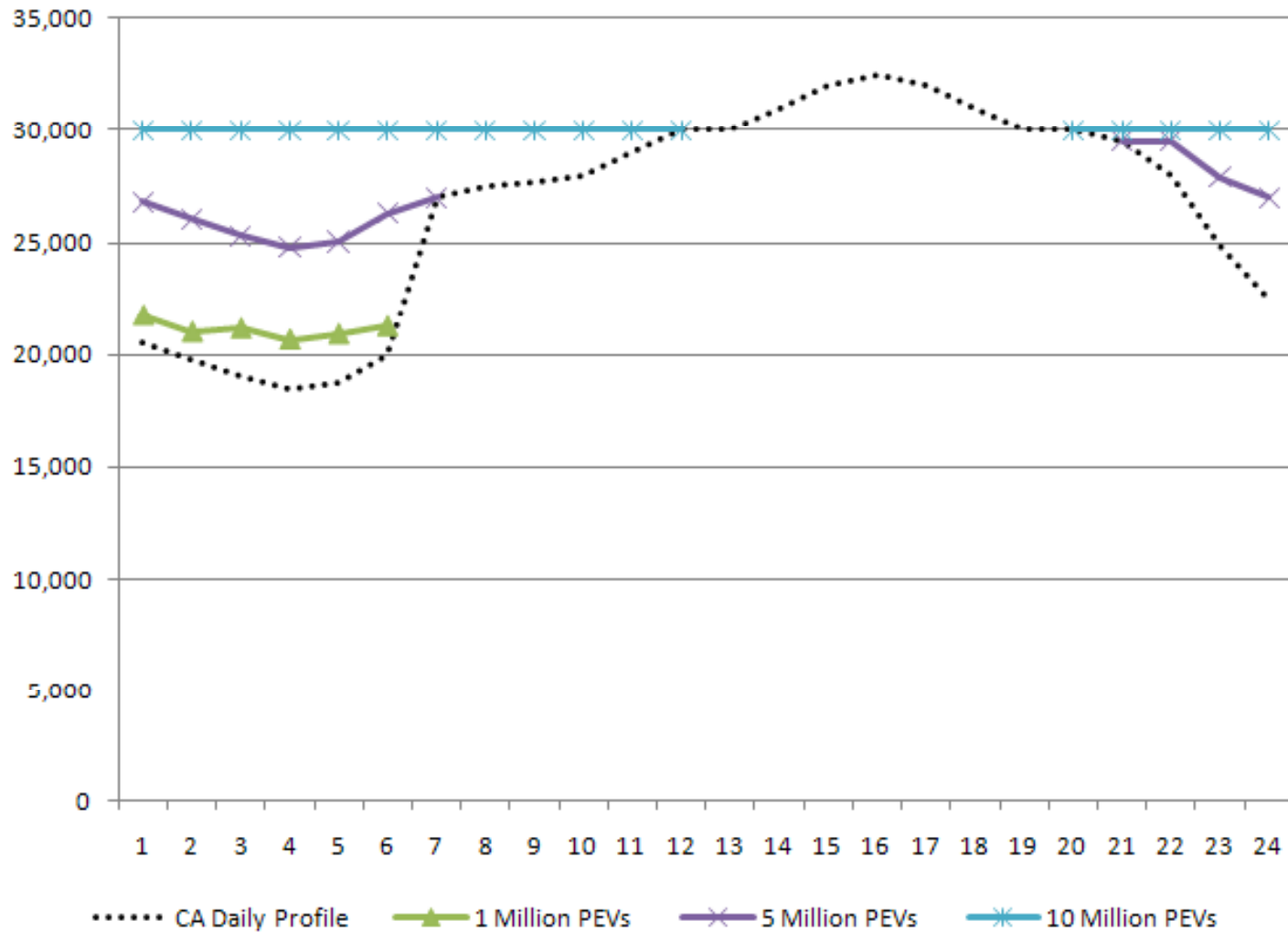
Age

© E Source; data from Nielsen Claritas 2010 Energy Audit

**We surveyed 32,142 homes across the U.S.**  
**93% of respondents say they drive < 50 mi/day**  
**4% definitely going to purchase a PEV, 12% very likely**



# Business Case: No-Brainer?



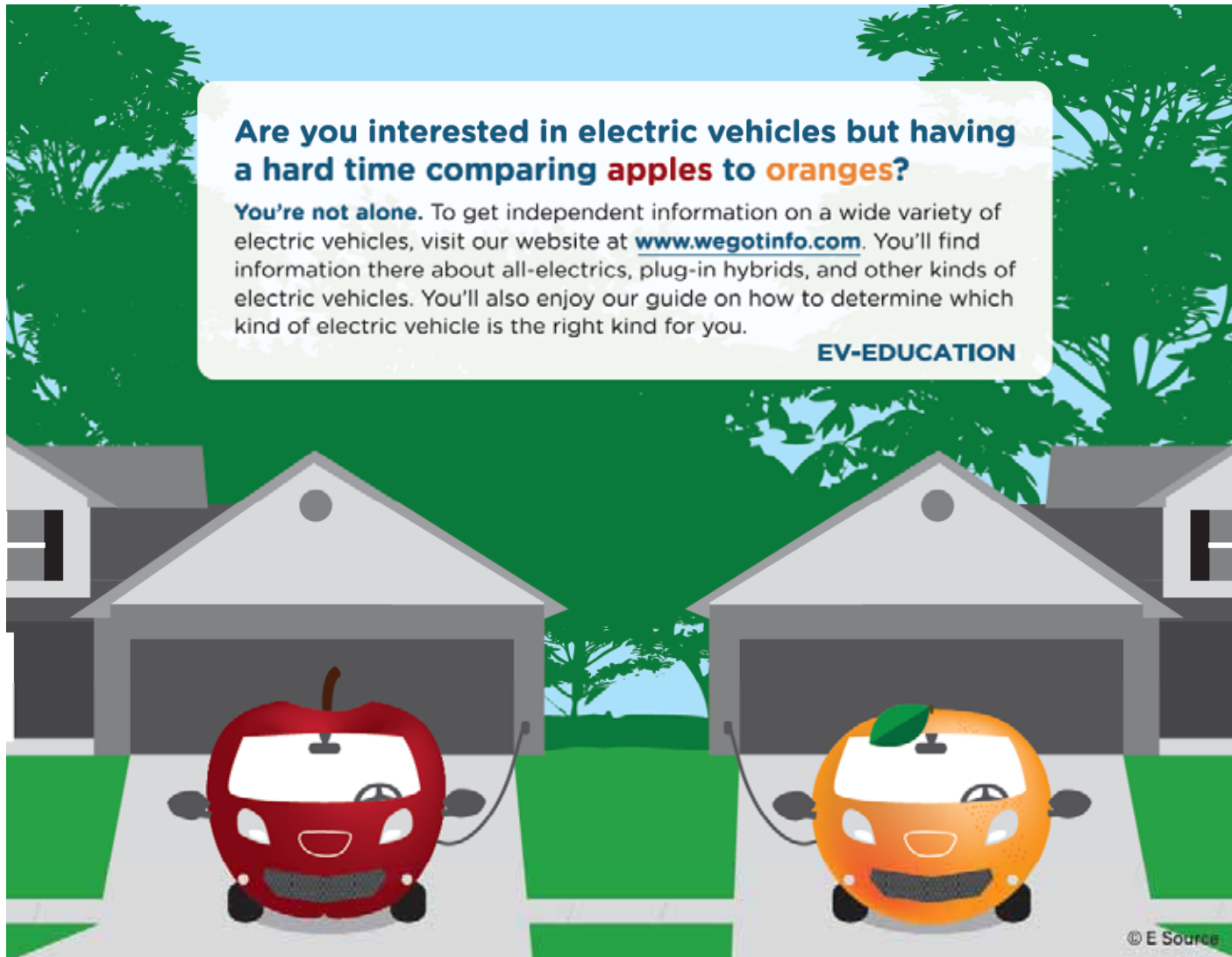
Modeling approach adapted from [An Innovation and Policy Agenda for Commercially Competitive Plug-in Hybrid Electric Vehicles](#).

# Customer Education

Are you interested in electric vehicles but having a hard time comparing apples to oranges?

**You're not alone.** To get independent information on a wide variety of electric vehicles, visit our website at [www.wegotinfo.com](http://www.wegotinfo.com). You'll find information there about all-electrics, plug-in hybrids, and other kinds of electric vehicles. You'll also enjoy our guide on how to determine which kind of electric vehicle is the right kind for you.

**EV-EDUCATION**

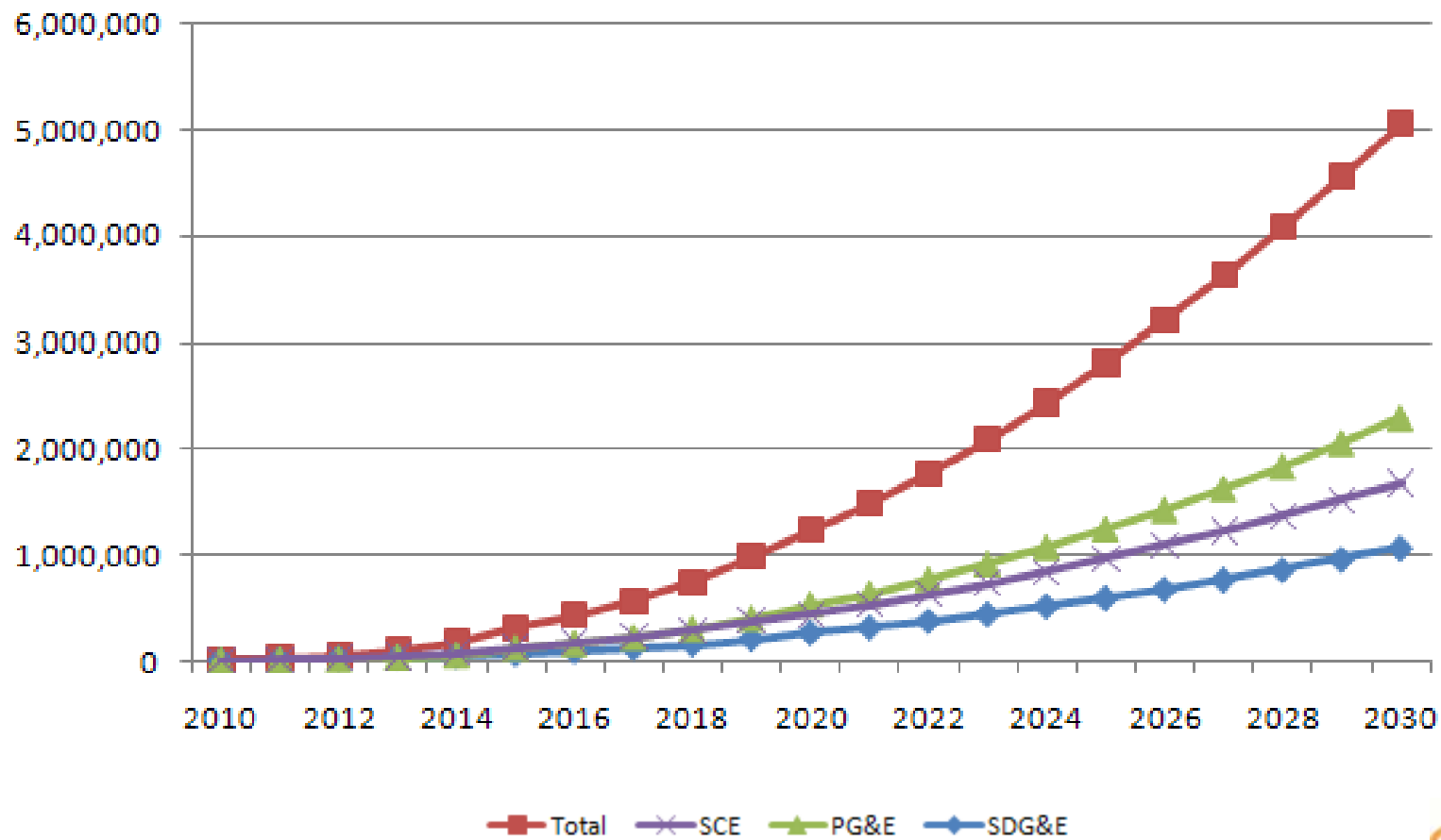


© E Source

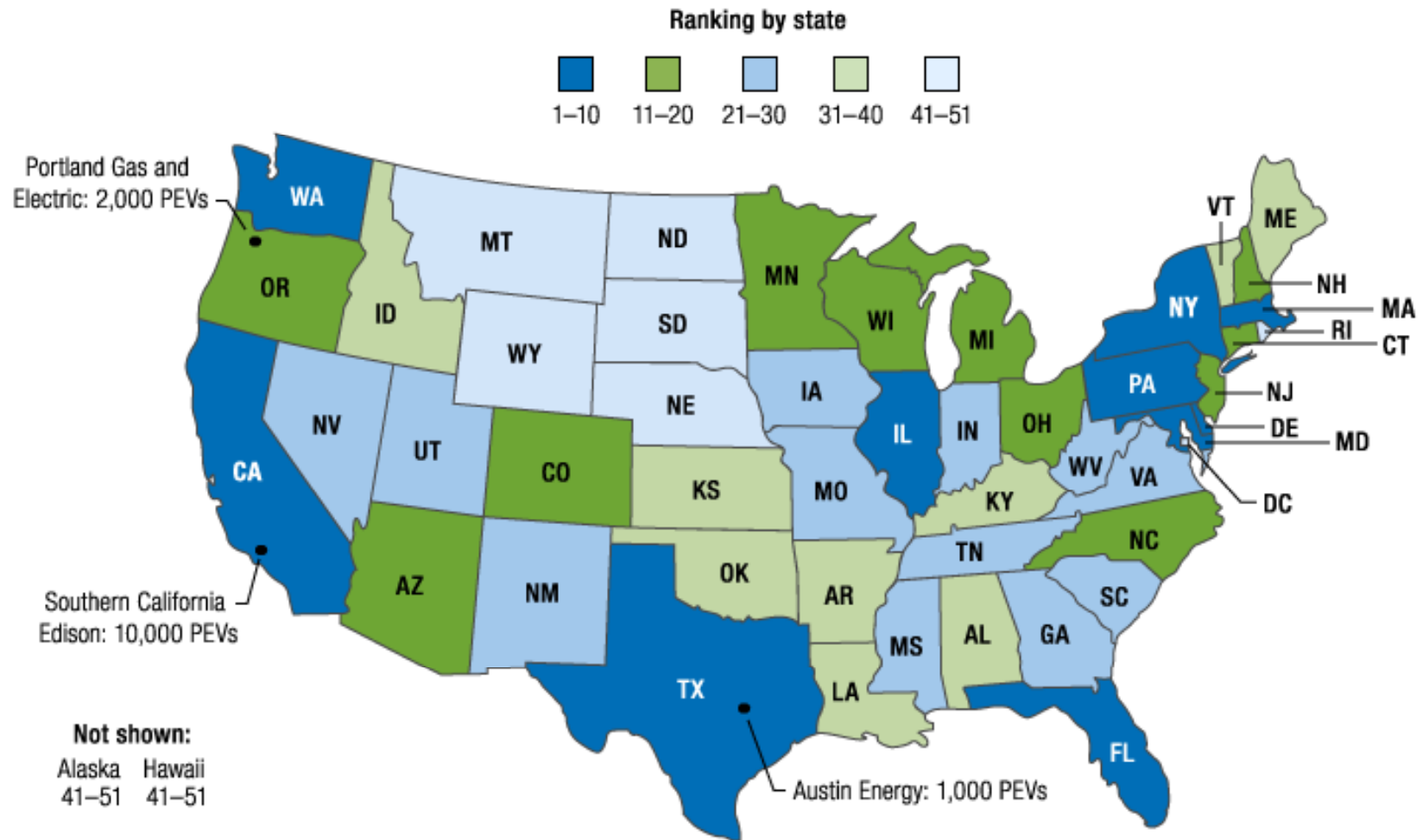
**A.E.S.P.**  
ASSOCIATION OF ENERGY  
SERVICES PROFESSIONALS

# Forecasting: Dubious But Necessary

## Cumulative PEVs (Medium Adoption)



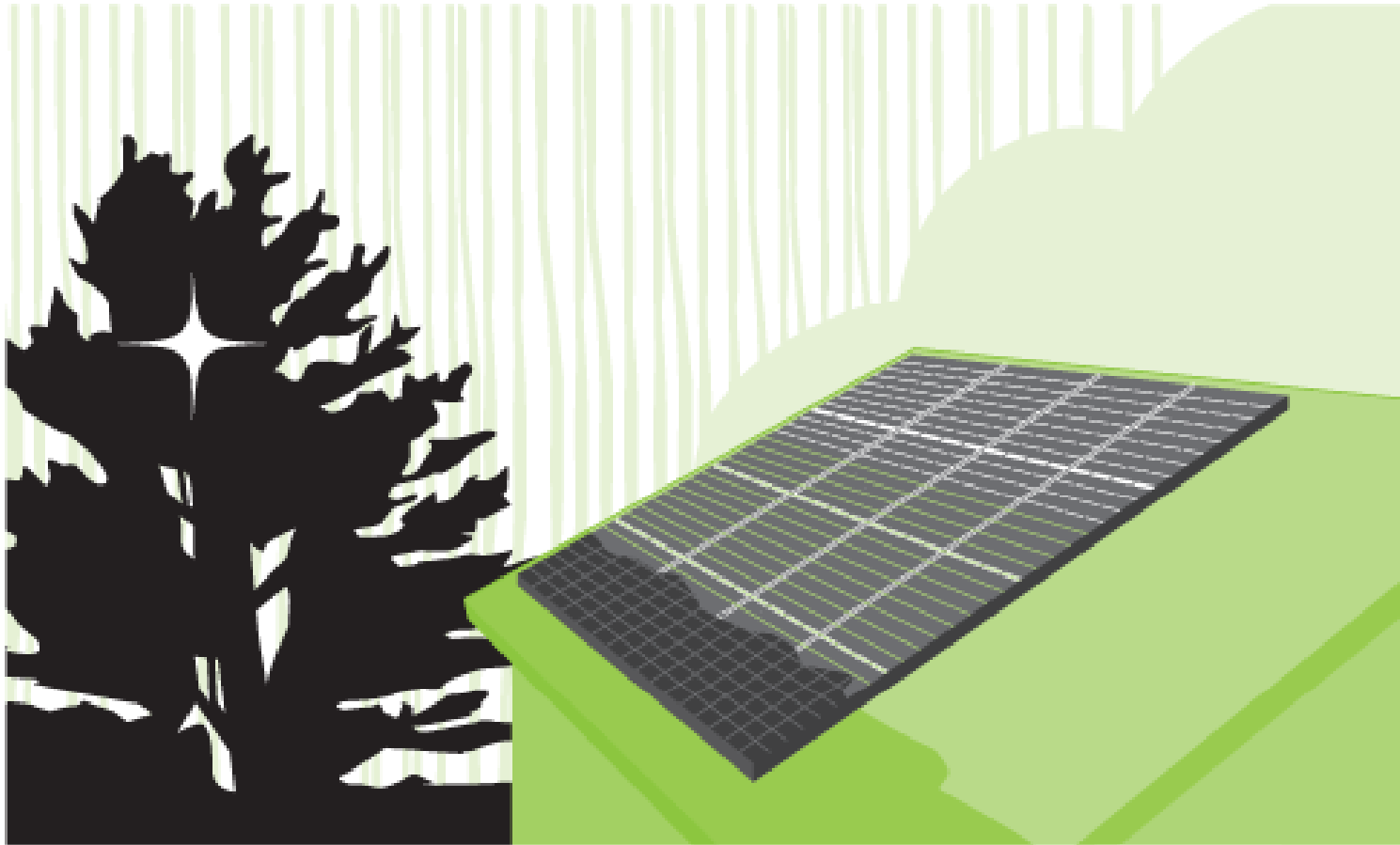
# Locating Likely Customers



Note: PEV = plug-in electric vehicle.

© E Source; data from KEMA

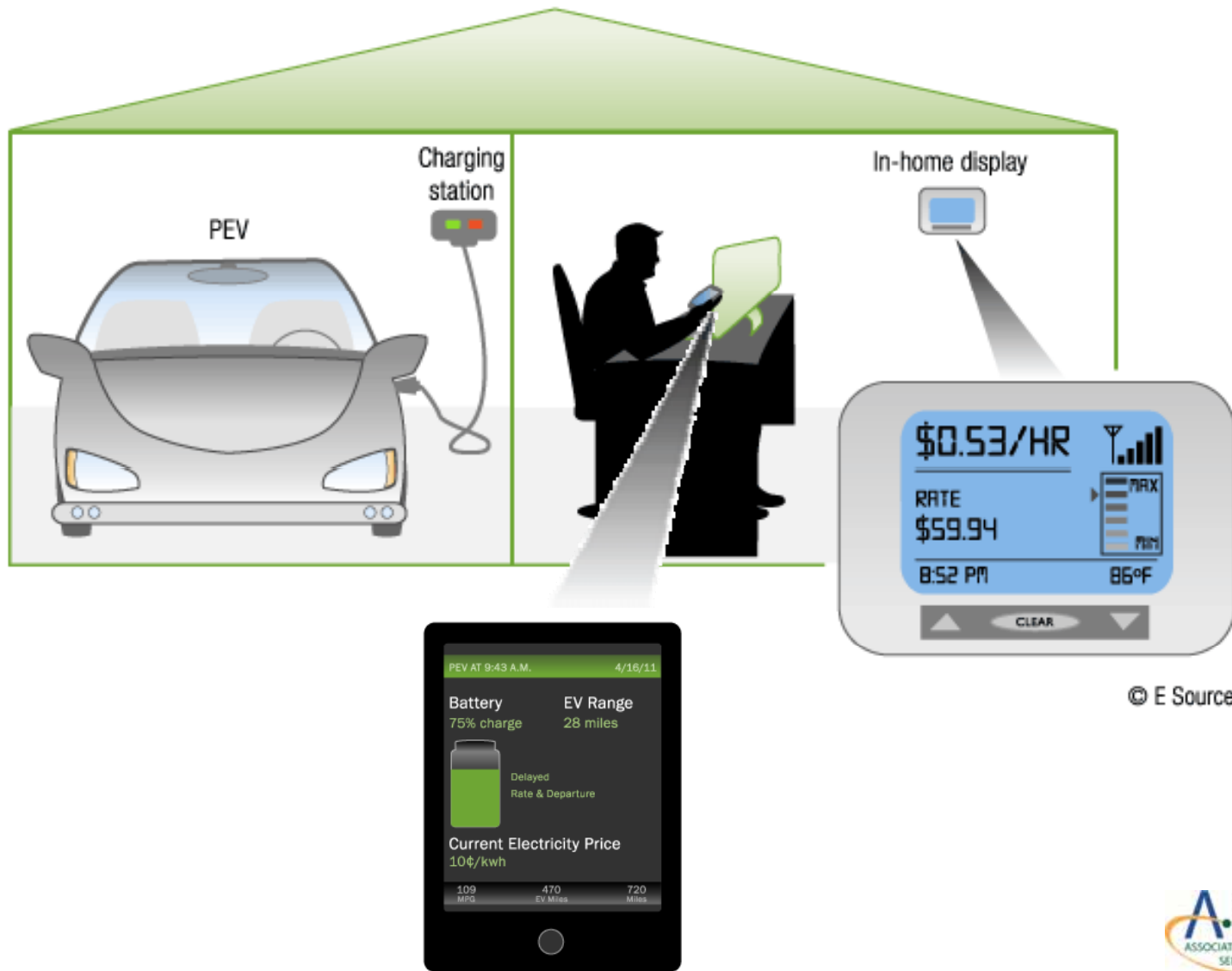
# Who Has Rooftop Solar?



© E SOURCE



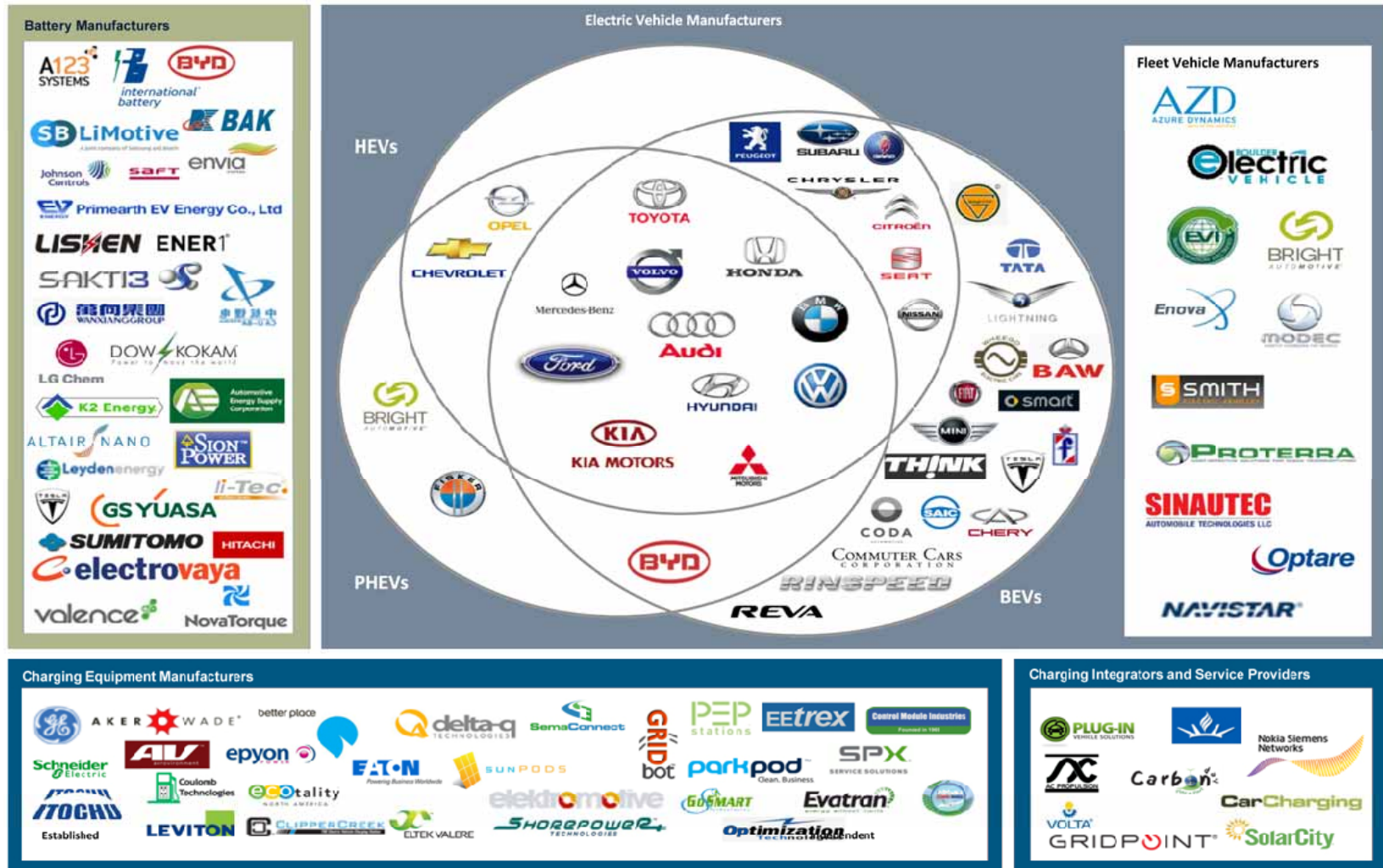
# New Points of Contact



© E Source

© E Source

# Partner Now, Benefit Later



Source: GTM Research, <http://www.greentechmedia.com/research/report/electric-vehicles-2012-technology-economics-and-market>

# Case Study #1: DTE & SPX



Source: Frank Venegas, <http://www.franksvinthed.com/tag/spx/>

## Process for Customer Participation

- Complete DTE's [application](#)
- Send in copy of vehicle registration
- Receive confirmation from DTE
- Send in signed program agreement
- Complete pre-installation survey
- Decide on rate and charger options
  - Flat rate: \$40/mo; or,
  - On-peak = \$0.182/kWh
  - Off-peak = \$0.077/kWh
  - [Calculator](#) available
- Coordinate installation with SPX
- SPX provides service, repair

# Case Study #2: IPL & AV



Courtesy: Kim Berry, Indianapolis Power and Light

## Process for Customer Participation

### *Public Charging*

- Flat rate: \$2.50/charge

### *Home Charging*

- Contact IPL to join [rate program](#)
- Fill out and send in enrollment form
- One rate (EVX), varies by time/season
- AMI meter required
- Online interface available from AV

# Riding the Wave of the Future



## *What to Expect Over the Next 5 Years...*

- Most PEV charging will take place at 120-volt outlets, primarily at home
- PEVs will come down in price, but will not reach price parity with gas vehicles
- PEV market share will grow steadily
- The Toyota Plug-in Prius will quickly become the top-selling PEV model
- Grid impacts will be minor and isolated
- Utilities will have time to respond and engage customers, but don't dawdle!

# For More Info...

- E Source: [www.esource.com](http://www.esource.com)
- Project Get Ready: <http://www.projectgetready.com>
- EPRI: <http://et.epri.com>
- EDTA: <http://www.electricdrive.org>
- CalCars: <http://www.calcars.org>
- Plug In America: <http://www.pluginamerica.org>
- SCE: <http://www.sce.com/PowerandEnvironment/PEV>
- SDG&E: <http://www.sdge.com/environment/cleantransportation>
- EV World: <http://www.evworld.com>

# Questions?





## Save the Date

**May 15-17, 2012**

**AESP's Spring Conference  
Baltimore, MD**

**Oct. 15-17, 2012**

**AESP's Fall Conference  
Long Beach, CA**

**Jan. 28-31, 2013**

**AESP's 23<sup>rd</sup> National Conference  
Orlando, FL**

**[www.aesp.org](http://www.aesp.org)**

