



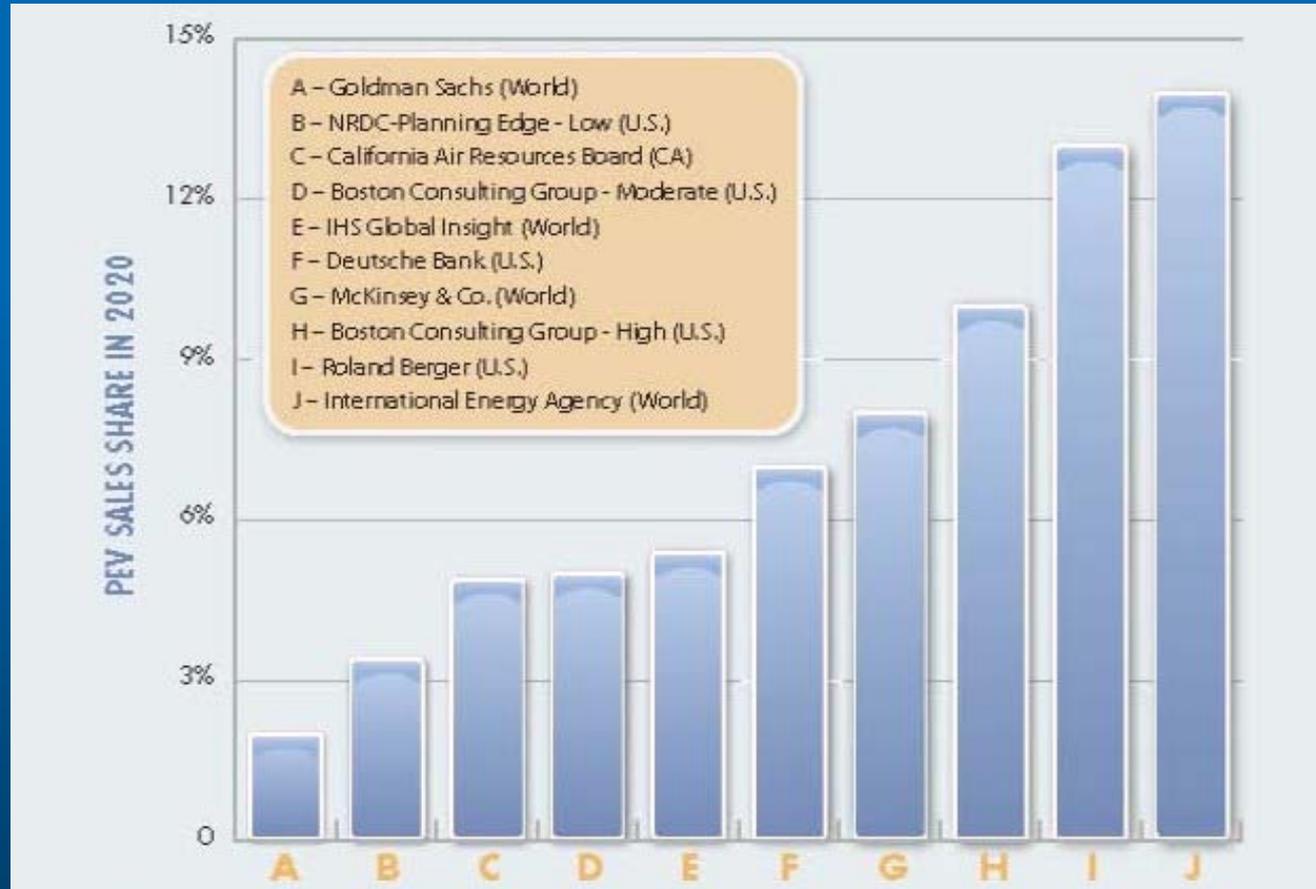
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The Plug-in Electric Vehicle Market

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September 9, 2011

What Is The Future For PEVs?



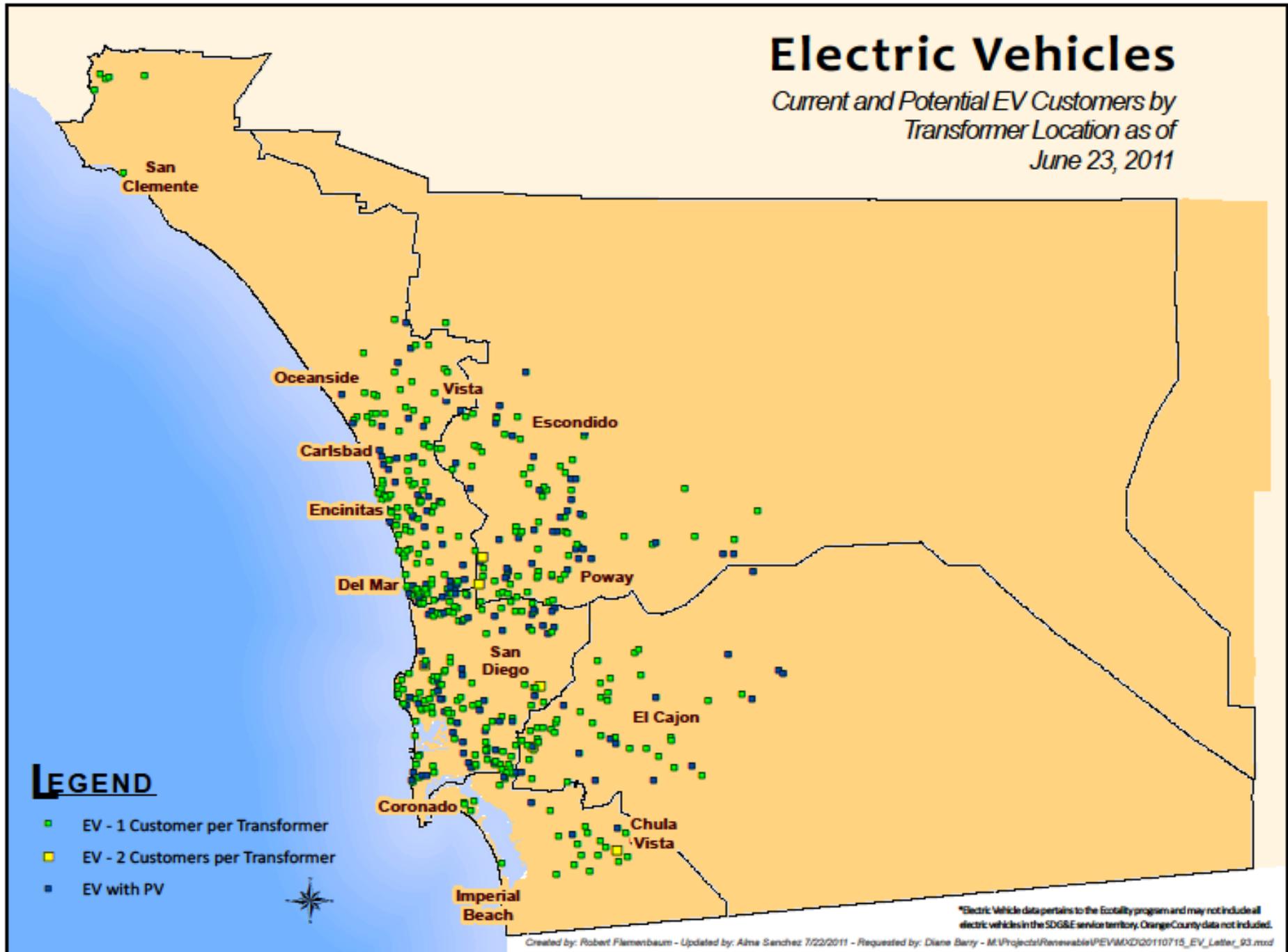
“Taking Charge – Establishing California Leadership in the Plug –In Electric Vehicle Marketplace”, *California Plug-In Electric Vehicle Collaborative, December 2010*
<http://www.evcollaborative.org/>

SDG&E's Situation

- **The EV Project – Ecotality installing 1,500 public and 1,000 home charging units**
- **SDG&E rate experiment**
- **Car2Go announces first all-electric car sharing program starting Dec 2011**
- **Several vehicle manufacturers plan to launch PEVs in California**

Electric Vehicles

Current and Potential EV Customers by
Transformer Location as of
June 23, 2011

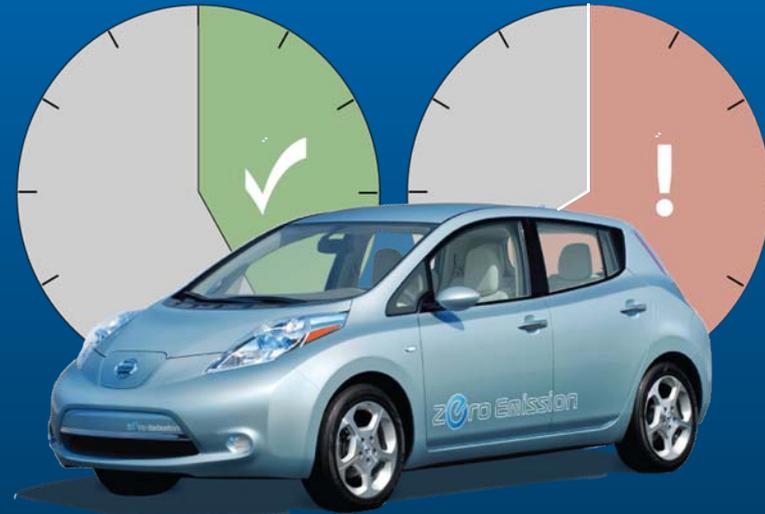


1. Barriers & Solutions

Barrier #1: Fuel Price

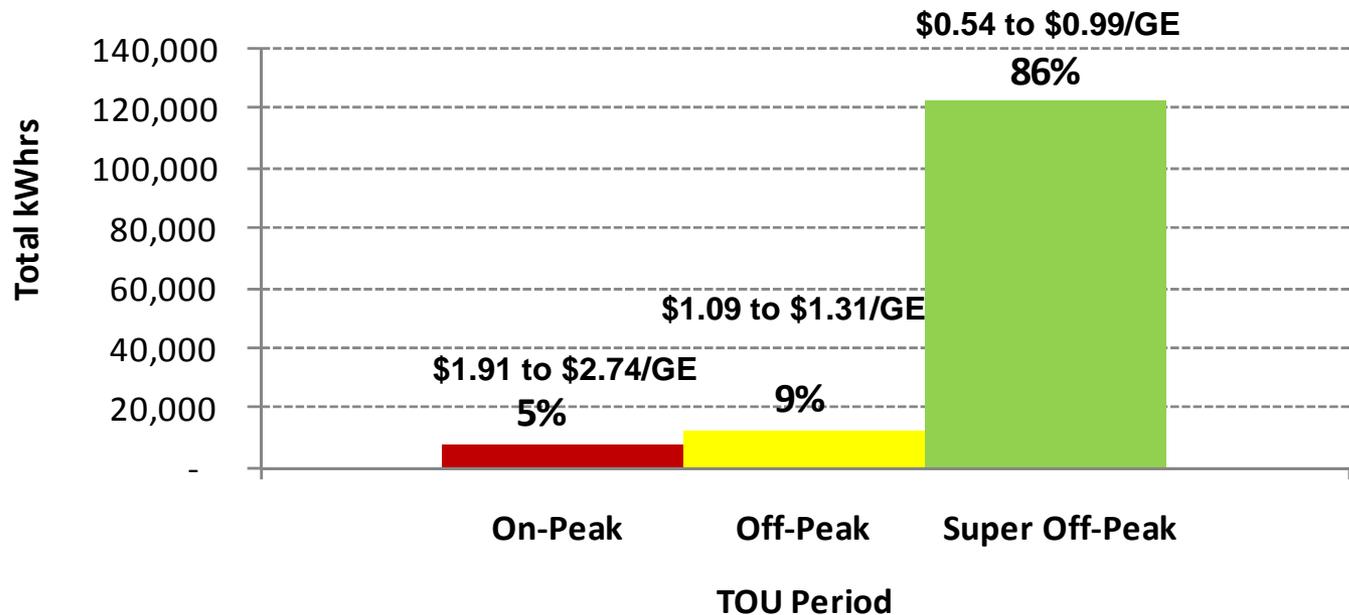
Solution: Maintain low fuel (electricity) prices

- Fuel cost savings help drive PEV sales
- Use LCFS credit to sustain low electricity prices
- Apply to off-peak rates to help the grid
- Create incentives to control rate and time of charge



Charging Behavior

PEV Customers Charging Off-Peak Total kWhrs by Time-of Use Period (142 MWhrs YTD)



PEV Rate Study participants only (n=298 as of 9/2/11). Excludes customers on EVTOU and EVTOU2.
Assumes 3.5 miles/kWh at the utility meter.

2. Barriers & Solutions

Barrier #2: Price of PEV ownership

Solution: Maintain PEV incentives to sustain “demand-pull”

- Maintain state & federal incentives until market is established
- Send a message to consumers to “buy now”
- Encourage the growth in PEV support service industry (create jobs)

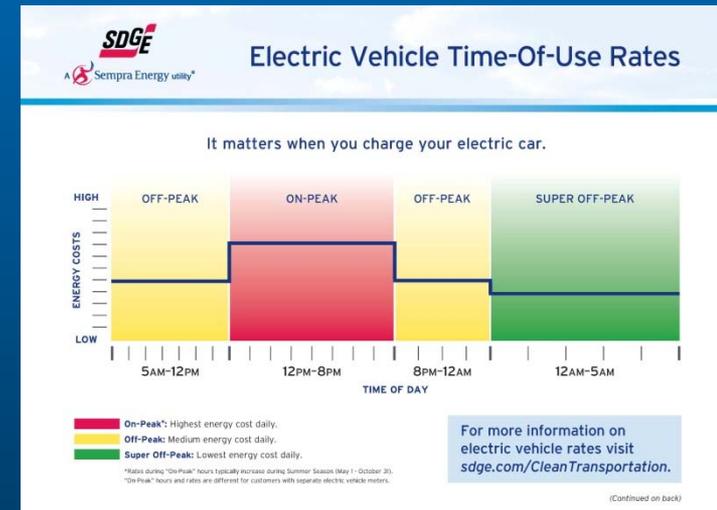


3. Barriers & Solutions

Barrier #3: Consumer & Stakeholder knowledge

Solution: Robust education and outreach

- Utility role – neutral & informative
- Customers: Residential MUDs, Fleet, Commercial (private and public) & Workplace charging
- Stakeholders: Contractors, policy makers, dealers, OEMs, suppliers



4. Barriers & Solutions

Barrier #4: Cost of EVSE

Solution: Encourage a variety of EVSE options

- Create price & product competition
- Allow utilities to explore technology options with electric vehicle service industry





Glimpse into the Future?

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