



Getting EV Policy Right

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ITS Davis, Asilomar 2011
Rethinking Energy and Climate Strategies for Transportation
August 30, 2011

No Silver Bullets (..but can't afford silver buckshot)



NRDC's Vehicle Electrification Strategy

1. **Long-term, strong, performance-based CO₂ standards** not just on vehicles emissions but also on electricity and liquid fuels markets
2. **Temporary incentives** to overcome initial barriers and fostering of **innovative business models** to create self sustaining market
3. **Alignment of utility policies with electrification goals** to reduce market barriers, create economic value for the grid and maximize environmental benefits

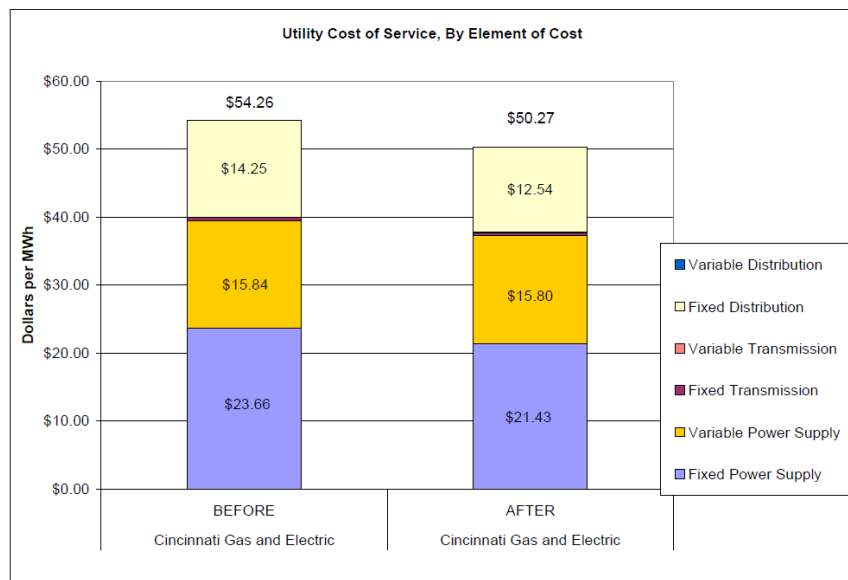
Alignment of Utility Policy with EV Goals

- **Necessary but not sufficient**
- **Poor or lack of alignment can create serious barrier to EV adoption**
 - Lack of TOU or EV charging rates
 - Who pays for infrastructure?
- **Off-peak and “smart charging” is key:**
 - Creates grid value that can provide incentive for utilities and drivers
 - Allows for greater integration of intermittent renewables

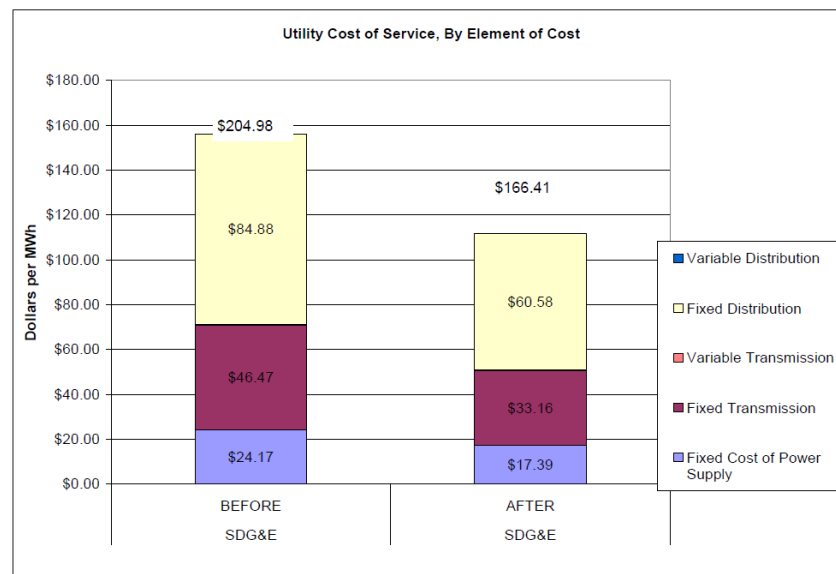
Off Peak Can Lower Marginal Costs

Thru better utilization of existing assets utilities, regardless of market or regulatory structure, can have incentive to accelerate EV deployment

Generator



Wires-Only



Source: Scott M., Kinter-Meyer, M., Elliot D. and Warwick, W., *Impacts Assessment of Plug-In Hybrid Vehicles on Electric Utilities and Regional U.S. Power Grids: Part II: Economic Assessment*, PNNL, (November 2007). Available at: <http://www.ferc.gov/about/com-mem/wellinghoff/5-24-07-technical-analy-wellinghoff.pdf>

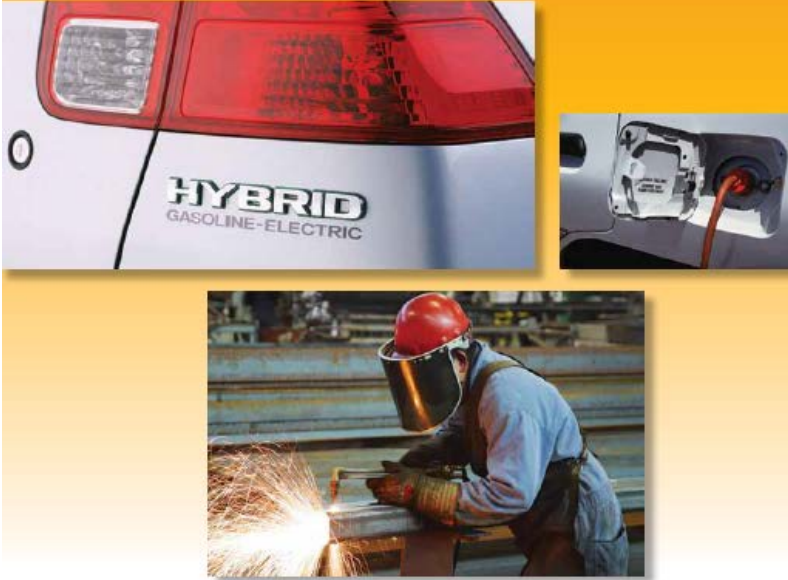
Jobs, Jobs, Jobs

150,000 current jobs in supplier industry, 43 states + DC, 504 facilities

Supplying Ingenuity

U.S. Suppliers of Clean, Fuel-Efficient Vehicle Technologies

August 2011










Figure 1: United States Suppliers of Low-Emission, Fuel-Efficient Vehicle Technologies (Number of Supplier Facilities by State)

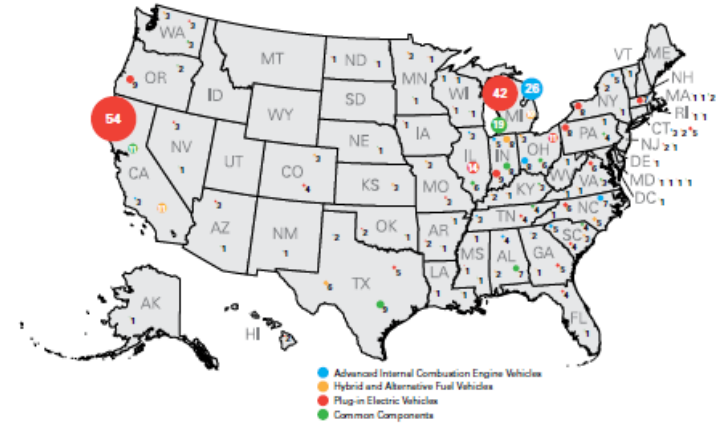
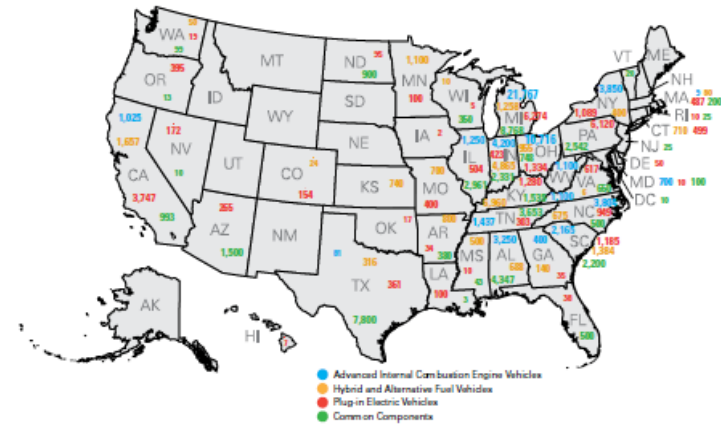


Figure 2: Employment by U.S. Fuel-Efficient Vehicle Technology Suppliers (Number of Supplier Employment by State)



Thank You

**“A Solar Car Has No ‘Elsewhere Emissions’
from Operation But Even a Solar Car Still
Causes Transport Problems”**

Lee Schipper