

**EV Everywhere Workshop**  
**July 30, 2012**

# **CONSUMER ACCEPTANCE AND PUBLIC POLICY**

**Charging Infrastructure**  
**Group E**

Charging Infrastructure

Breakout Session #1 – Brainstorm Consumer Acceptance Barriers and Infrastructure Scenarios

- **Infrastructure Scenarios**
  - Domicile & Workplace Charging: Being available where vehicles spend a lot of time (Level 1/2)
  - Gas Station model
    - Fast charging
    - Battery Swap
    - Flow Batteries: Electrolyte swap for long distance traveling
  - Dynamic Wireless Charging
  - Strategically placed and visible
  - Widespread and visible

**Breakout Session #2 – Refine Consumer Acceptance Concepts and Infrastructure Scenarios**

- **DOE Actions for Fast Charging Scenario:**
  - R&D on power transfer rates for batteries
  - Energy storage research to minimize grid impacts and demand charges
  - Develop education and awareness activities
  - Joint project to evaluate stations in other countries
- **DOE Actions for Battery Swap:**
  - Energy storage research to minimize grid impacts and demand charges
  - Support the development of Codes and Standards for battery vehicle interface
  - Joint project to evaluate stations in other countries
- **DOE Actions for Dynamic Wireless:**
  - FOA or design competition for dynamic wireless charging
  - Joint project to evaluate demonstrations in other countries
  - Support the development of dynamic wireless codes and standards

*Breakout Session #3 – Develop Action Plans and Major Findings*

• **DOE General Actions**

- Convene government/industry groups to identify specific regulatory, education, codes & standards, installation, and hardware issues to be resolved to enable widespread residential/MDU and workplace charging infrastructure
  - Include use case data collected to date and collect data not available
- Work with DOT and planning entities to use detailed travel data to conduct thorough study to define infrastructure quantities and scale to support long-distance GCEDV travel.
- Develop siting methods for MDU and workplace infrastructure.
- Convene government/industry stakeholder groups to create a roadmap to address Interoperability of charging infrastructure with all vehicle technologies.
- Add Infrastructure topics to annual EERE business plan competitions.
- Align infrastructure development with “Free the Data/Green Button” Initiatives.