# EV Everywhere Workshop July 30, 2012

# CONSUMER ACCEPTANCE AND PUBLIC POLICY

Consumer Acceptance Group 'B'

#### **Consumer Acceptance**

# <u>Breakout Session #1 – Brainstorm Consumer Acceptance Barriers and Infrastructure</u> Scenarios

- Consumer Education/Emotion
  - Vehicle Exposure butts in seats (ride & drive, car sharing, IT/phones, rental fleets)
    - Consumers understanding their needs
    - Range anxiety/opportunity
    - Customer Personal Value Proposition
  - Charging Exposure
    - Start small (battery size and charging level), move complicated
  - Marketing
    - Got Milk?
    - Patriotism, etc., in place of only green focus
- Creating Demand
  - Emphasize fun/cool/patriotism (again)
  - Make & model availability
- Workplace/public Charging
  - Multi-unit
  - V2G
- Signage
- Financial Incentives

July 30, 2012

#### **Consumer Acceptance**

# <u>Breakout Session #1 – Brainstorm Consumer Acceptance Barriers and Infrastructure</u> Scenarios

- Innovative Financing Models
  - Financial Incentives (free electricity, tax exemptions, point of sale rebate, guaranteed residual value, innovative amortization)
- Innovative Sales Models
  - Green dealerships
- Other
  - Rental car (regional EV experience, required electric miles)
  - Rental APU trailer (AAA)
  - Innovative vehicle design
  - Charge point sharing
  - Drivers education about EVs and using EVs

## <u>Breakout Session #2 – Refine Consumer Acceptance Concepts and</u> Infrastructure Scenarios

- Charging Exposure
- Workplace/Public Charging
- Signage
- Green = Pros
- Red/Yellow = Cons
- Purple = Policy/Action Items

## <u>Breakout Session #2 – Refine Consumer Acceptance Concepts and</u> <u>Infrastructure Scenarios</u>

# Vehicle Exposure

- Promote PEV segment awareness
  - DOE should include near-term market focus
  - Understand role in messaging
  - Be mindful of scooters and 3-wheelers
- Facilitate butts in seats
  - DOE-sponsored ride & drive
    - Drive cycle should be truly personal
  - DOE EV rental experience locations
  - DOE government and/or rental EV fleet
- Develop drivers education curriculum and provide vehicles
- Collect and disseminate information on OEM market data and consumer experience

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

# Creating Demand

- Keep messaging simple
  - Put a face on real consumers disseminate testimonials
  - Offer clarity around the value proposition (IT/phone apps and real drive cycles, limit \$/mi to fuel)
- Coordinate with OE, especially with respect to PR and messaging
- HOV access
- Study language and messaging to ensure phrasing does not unintentionally create barriers (i.e., "range anxiety")

## <u>Breakout Session #2 – Refine Consumer Acceptance Concepts and</u> <u>Infrastructure Scenarios</u>

#### Financial Incentives

- Leverage fleet acquisitions
  - Use government fleet to improve economies of scale and learning curve
  - Offer non-Federal fleets a buy-down program that uses fuel savings to make annual budgets look good despite incremental costs
- Innovative financing
  - Make tax credits transferrable
  - Offer preferential financing (unbundle battery, package electricity, "spike" payments amortize attractively)
- Disseminate best practices for EV fleets
- Subsidize EV taxis to showcase technology in a prominent way
- Coordinate among utilities and regulators to enable V2G and battery second use to enhance overall TCO
- Fuel tax reform

## <u>Breakout Session #2 – Refine Consumer Acceptance Concepts and</u> <u>Infrastructure Scenarios</u>

# **Charging Exposure**

- Demonstrate ease of charging keep it simple (Level 1s everywhere)
- ID high opportunity charging provide pilot programs
- Studies
  - Economic value of chargers, including sales tax revenue
  - EVSE public usage patterns (continuation of the EV project)
  - Battery back up charging
  - Car as smartest appliance in home communications data management/sharing
- "Guerilla marketing" positively positioning EVs in public eye
- Charge "etiquette"
- APU trailer opportunity to extend vehicle range (e.g. analogous to renting AAA's fast charger)

#### Breakout Session #3 - Develop Action Plans and Major Findings

# **Workplace/Public Charging**

- Incentivize permit agencies
  - Publish best practices
- Link to SunShot (study where this could be possible)
- Incentivize workplace charging for multiple purposes (fleets, employees, and public)
  - Government liability protection for employers choosing to make their stations public
- Develop smart 120V systems
- Study roll-out timing public vs. workplace

#### Breakout Session #3 - Develop Action Plans and Major Findings

# Signage

- Standardize at the national level (symbol, color)
  - Best practice hierarchy of signage, e.g. treasure map
  - Disseminate logo stickers or branding
  - Incentives for cash-strapped municipalities
  - Clarify charge speed versus "keep it simple"
- Clarify ADA regulations regarding parking requirements
- Provide simple educational information on/near sign
- Include signage on driver's education tests
- Charge "etiquette"
- Maintain accurate charger database