### EV Everywhere Grand Challenge -- Battery Workshop

Thursday, July 26, 2012 - Doubletree O'Hare, Chicago, IL

Event Objective: DOE aims to obtain stakeholder input on the energy storage goals of the EV Everywhere Grand Challenge. This input will direct the aggressive next-generation technology development necessary to enable U.S. companies to be the first in the world to produce plug-in electric vehicles (PEVs) that are as affordable and convenient for the average American family as today's gasoline-powered vehicles within the next 10 years.

8:00-8:30 AM	CONTINENTAL BREAKFAST (in registration area)
8:30-8:35 AM	CALL TO ORDER  Mr. Patrick Davis, DOE EERE Vehicle Technologies Program
8:35-8:45 AM	WELCOMING REMARKS  Mr. David Sandalow, Under Secretary of Energy (acting) and Assistant  Secretary for Policy and International Affairs
8:45-8:55 AM	SETTING THE STAGE FOR THE EV EVERYWHERE GRAND CHALLENGE  Dr. David Danielson, Assistant Secretary of Energy, EERE
8:55-9:05 AM	RESULTS FROM INITIAL FRAMING WORKSHOP  Patrick Davis, DOE EERE Vehicle Technologies Program
9:05-9:25 AM	THE EV EVERYWHERE CHALLENGE – TARGET SETTING  Jake Ward, DOE EERE Vehicle Technologies Program
9:25-9:50 AM	EV BATTERY TECHNOLOGY—CURRENT STATUS & COST CHALLENGES  David Howell, DOE EERE Vehicle Technologies Program
9:50-10:05 AM	ARPA-E's BEEST PORTFOLIO—CHALLENGES & OPPORTUNITIES  John Lemmon, DOE ARPA-E Program
10:05-10:10 AM	GUIDELINES AND CHARGE TO BREAKOUT SESSIONS  David Howell, DOE EERE Vehicle Technologies Program
10:10-10:30 AM	BREAK (move into breakout rooms)

# 10:30-12:00 PM BREAKOUT SESSION #1 – *EV EVERYWHERE* SCOPE & TECHNICAL TARGETS (4 breakout groups)

- Next-Generation Li-Ion Batteries
- Beyond Li-Ion Batteries
- Materials Processing and Manufacturing
- Pack Design and Optimization
- Introductions and discussion of current state-of-art of the breakout group's focus area.
- Are the initially posed EV-Everywhere battery performance and cost targets achievable?
- What role can the breakout group's focus area play on achieving these targets? What are the major pathways to cost reduction? What are the major barriers?

### 12:00-12:30 PM BREAK (pick up lunch for WORKING LUNCH in Breakout Session #2)

### 12:30-1:50 PM BREAKOUT SESSION #2 – IDENTIFY NEEDS / GAME-CHANGING IDEAS

- What are the specific highest-impact critical technology breakthroughs that are needed to achieve the EV-Everywhere Challenge?
- Are there "out of the box", risky, or other approaches that should be considered?
- Each participant is encouraged to informally endorse or propose a single research idea or concept that could be applied to EV Everywhere

### 1:50-2:20 PM INTERIM REPORTING OUT FROM BREAKOUT GROUPS

### 2:20-2:30 PM BREAK

## 2:30-3:40 PM BREAKOUT SESSION #3 – DEVELOP ACTION PLANS & PREPARE SLIDES OF MAJOR FINDINGS

- What role can the breakout group's focus area play toward enabling the success of the technologies being discussed by the other groups?
- What advances from the other technology areas will enable success in your focus area?

### 3:40-3:50 PM REASSEMBLE FOR FINAL REPORTING OUT FROM BREAKOUT GROUPS

#### 3:50-4:50 PM BREAKOUT GROUPS REPORTS

- Next-Generation Li-Ion Batteries
- Beyond Li-Ion Batteries
- Materials Processing and Manufacturing
- Pack Design and Optimization

### 4:50-5:00 PM WRAP-UP / CLOSING REMARKS

### 5:00 PM ADJOURN