



EVS 23

December 2 - 5, 2007

**SUSTAINABILITY:
THE FUTURE OF TRANSPORTATION**

ANAHEIM, CALIFORNIA USA

Welcome to The PHEV Workshop

Edward Kjaer

Director, Southern California Edison

HOSTED BY:

EDTA

Electric Drive Transportation Association

In partnership with the World Electric
Vehicle Association (WEVA)

Agenda

9.15- 10.15am (Welcome, Special Guest, Introduction)

- Overview of PHEVs – EPRI
- Commercial Duty PHEV dev & demos – Eaton Corp
- CARB expert panel battery technology overview – Fritz Kalhammer

Agenda

10.15-10.45am (OEM/utility Collaboration)

- Ford / SCE PHEV Escape SUV eval & demo- Ford
- Discussion

Morning Break 10.45-11.00am

Agenda

11.00- 12.30pm (Panel Discussion Infrastructure and Emissions)

- EPRI/NRDC pollution and GHG study- EPRI
- European infrastructure vision- EDF
- Utility value proposition- EPRI
- Smart meters- SCE
- Discussion

Lunch Break 12.30-1.30pm

Agenda

1.30-3.00pm (OEM Program and Panel Discussion on Incentives for PHEVs)

- Toyota PHEVs- Toyota
- Federal/state incentives- EDTA & SCE
- Monaco incentives
- Japanese PHEV efforts- Keio University
- Discussion

Agenda

3.00-3.30pm (OEM Program)

- GM Range extender and PHEV- GM
- Discussion

Afternoon Break 3.30-3.45pm

Agenda

3.45-5.15pm (Panel Discussion)

- Government, Automakers and Utilities
- Discussion
- Wrap-up and adjourn

...Out of Consideration

Please set to “vibrate” your phones/
pagers/ blackberrys/ PDAs etc.

Setting The Tone

- Where are you **realistically today** and what are the **challenges**?
- What are the **needs** of your customers?
- What are your **near term** versus **long term priorities**?
- What are the opportunities for **collaboration** to help you address challenges and meet needs?
- What do you **need** to move forward?

Thought Starters

- Getting to a **sustainable business case**-
Lose \$s on every unit...& make it up in volume?
- Dealing with hundreds of utilities in the country
- **Connection and Communication standards**
- Batteries to **drive the wheels FIRST...**
before we put power in the grid!
- Today every battery pack, in every vehicle, from every OEM... is **“different”**

Thought Starters

- Is first use volume possible from both **mobile and stationary** applications?
- Separate battery ownership, leasing, secondary use, or are there new business models?
- Before we have a secondary use market...we need **first use volume** and time in the field
- 10yr/150,000 mile battery warranty requirement ...a short term barrier?
- No **domestic battery manufacturing/supplier** base

Final Thought...Before We Begin

EVS 23-

- Approximately 1500 delegates
- From 37 countries
- 125 exhibitors
- 100+ international media.
- 30% of conference participants in this room today!
- Clearly plug-ins are a **focus**- but there is still much work ahead to make them a **reality**...

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Toyota Prius



Volvo Recharge



Ford Escape



Saturn Vue



Mitsubishi i-MiEV



Chevy Volt



Working Together-
We Can Make This
Happen



Daimler Sprinter



Audi Metroproject



Daimler Smart

Thank You

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Southern California Edison

- One of the largest electric utilities in the USA
- 50,000 square-miles / 4.8 million customers
- **Generation** includes 16% renewables (*We purchase 1/6th of nation's wind and 90% of nation's solar*)
- Deliver one of largest **Energy Efficiency** programs in the country (*over last five years saved 4 billion kWhs- enough energy to power 500,000 homes for a year*)
- Operate **largest EV fleet** in the nation (300 EVs – 15 million miles)
- Operate **EV Tech Center** in Pomona- unique in utility industry
 - ▶ ISO 9001:2000 registered facility