Refueling Infrastructure for Alternative Fuel Vehicles: Lessons Learned for Hydrogen

Panel Session III: Innovation and Coordination

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Hydrogen Vision

Figure ES-1. Vehicle Technology Market Shares in Scenario 3

Source: Greene and Leiby. 2007
Hydrogen Infrastructure Today

Annual Costs Per Station: Scenario C

Innovation and Coordination

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Innovation and Coordination

- Fuel production and delivery technology
- Vehicle technology
- Marketing
- Policy
- Early introduction strategy
- GHG strategies
- Codes and standards
- Education and outreach
What happened?

- Were obstacles burdensome?
- Did we invest wisely?
- Do we have the right incentives?
- What can we learn from CNG, ethanol, methanol, battery EV?
- Do we factor in risks of:
  - Climate Change
  - Peak Oil?
Panel Session III: Innovation and Coordination

- Tim Gerlach, American Lung Association of the Upper Midwest
- Britta Gross, General Motors
- Catherine Dunwoody, California Fuel Cell Partnership
- Ulrich Bünger, L-B-Systemtechnik
- Discussion
A Hydrogen Vision

“With a new national commitment, … the first car driven by a child born today could be powered by hydrogen, and pollution free.”

- President George W. Bush
About Life Cycle Associates

Tools
- BEACCON Model
- GREET Poker
- MOUSE
- Pathway PDL

Experience
- Our experience with a broad range of fuels and processes, and our expertise in model development allow us to analyze the complex nature of energy and environmental issues in a transparent manner.

Capabilities
- "Well-to-Wheel" (Fuel Cycle) Analysis
- Process Analysis
- Economic Analysis
- GHG Strategy

www.lifecycleassociates.com