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The Imperative for Hydrogen Infrastructure

Presentation to the California Energy Commission April 14, 2009
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On behalf of Daimler AG

Daimler's Technology Portfolio for Sustainable Mobility

- Recognizes CA's goals of greenhouse gas and petroleum reduction (AB 32, AB 1493, AB 118, etc.)
- Optimizing current vehicles, downsizing, adding hybridization and moving to ZEV technology (battery and fuel cell EVs)
- Portfolio of technologies needed for different driving needs

Smart EV & B-Class F-Cell





Challenges Remain

- While both BEV and FCV technologies offer GHG reduction, efficient operation & freedom from petroleum:
 - Infrastructure for both technologies is lacking
 - Costs for battery technology needs to be reduced
 - Volume needed to drive FCV costs to parity with hybrid/diesel technology
 - Both technologies need to prove their worth in the real world with real customers

Daimler's Commitment

- Daimler is committed to BEVs and FCVs
 - 100 Smart EVs in London/Berlin coming to US
 - 100 Fuel cell vehicles (60 F-Cells/36 Citaro buses/3 Sprinter vans) on the road now in three continents
 - Increased volumes of both technologies coming soon
 - Daimler is committed to commercializing both technologies and is spending the money to accomplish this (i.e., 1.2 billion Euros since 1994 on FCVs)
 - Participating in DOE demonstration projects

FCVs in CA

- Daimler FCVs are part of a growing industry fleet in California
- Growth in numbers planned, but dependent on infrastructure
- Infrastructure growth is key to increasing vehicle production volume and reducing costs
- Goal for FCV is to reduce incremental cost to same as hybrid/diesel by 2015

Hydrogen Infrastructure Keys

- Fueling stations must be there when vehicles arrive in quantity
- Sufficient stations must be available in targeted market areas (identified in CaFCP "Action Plan")
 - West side of Los Angeles-Orange County
- Fueling stations must meet consumer expectations (like gas station fill ups – easy, quick)
- Quality of fuel must be assured/stable
- All stations must be available to all FCVs

Questions?

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