

# California's Bioenergy Action Plan Workshop

## Summary of ARB Activities

Robert Sawyer, PhD  
Chair

<b>DOCKET</b> 06-BAP-1	
DATE	JUN 11 2007
RECD.	JUN 08 2007

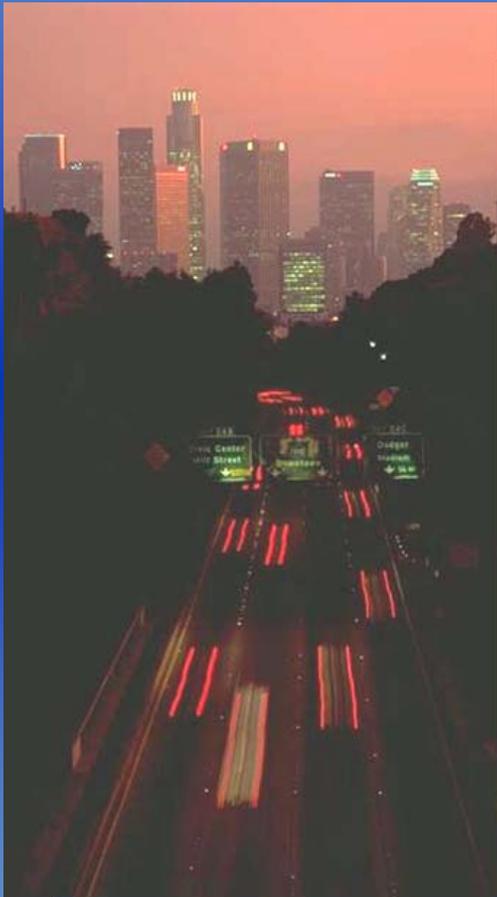
11 June 2007

California Environmental Protection Agency



**Air Resources Board**

# Presentation Overview



- Reformulated Gasoline
- Low Carbon Fuel Standard
- Biofuel Infrastructure and Specifications
- Biodiesel Warranties
- Emissions Performance Standards for Biomass Production
- Alternative Fuel Incentive Program

# **Encourage Biofuel Use Through Amendments to the California Reformulated Gasoline Regulations**

## **☞ Proposed amendments:**

- Preserve the emissions benefits of using reformulated gasoline**
- Update the California Predictive Model (CPM)**
- Favor the use of E10 with the CPM**
- Mitigate permeation emissions from on-road vehicles**

**☞ Scheduled for Board consideration on  
14 June 2007**

# Evaluate the GHG Emission Reduction Benefits of Biofuels and Biomass Production and Use

- In January 2007, Governor issued Executive Order S-01-07 establishing goal for a low carbon fuel standard (LCFS)
- Goal to reduce carbon intensity of transportation fuels 10% by 2020
- ARB plans to develop LCFS by end of 2008
- AB 1007 Report critical first step

# Evaluate the GHG Emission Reduction Benefits of Biofuels and Biomass Production and Use (continued)

- ➡ AB 1007/LCFS address many policy objectives in the Bioenergy Action Plan
  - Assess GHG benefits of fuel use/production
  - Address multi-media impacts, emissions performance, costs, and fuel supply
- ➡ UCB/UCD study treats technical and policy issues; study to be incorporated into AB 1007 Report
- ➡ AB 1007 Report also includes draft compliance schedule

# Consider Regulatory Levers to Encourage E-85 Stations

- ➡ Multi-stakeholder one year demonstration program currently underway
  - 50 new FFVs in California Fleet
  - Final report early 2008



- ➡ Board recently approved \$4 million to support E85 stations in Sacramento Metro area and other locations
- ➡ Studies help identify issues

# Establish Biofuel Specifications

- ➡ **Biodiesel – ARB funding \$2 million in research studies to evaluate:**
  - Multi-media impacts
  - Emissions (NO<sub>x</sub>, PM, GHG)
  - Range of biodiesel blends
- ➡ **Ethanol**
  - Develop E10 certification fuel specifications
  - Consider revising E85 specifications
- ➡ **ARB propose specifications in 2008**

# Consider Regulations that Require Manufacturers to Provide Warranties for Low-Level Biodiesel Use

- ➡ Engine manufacturers already provide warranties for B2 and B5
- ➡ ARB working with the engine and emission control technology manufacturers to voluntarily provide warranties for B20
- ➡ Emission test programs will assist in securing warranties based on performance results

# Recommend Emissions Performance Standards for the Use of Biofuels/Biomass in Stationary Sources



- Initiating development efforts
- Establishing working group
  - ARB
  - CEC/California Biomass Collaborative
  - Local Air Districts
  - Facility Operators
  - Other interested parties
- Recommendations available mid-2008

# **\$25 Million Alternative Fuels Incentive Program**

- ARB allocated \$25 million for alternative fuel and vehicles**
- Joint effort with the California Energy Commission**
- 40 proposals approved for funding**
- Funds allocated by July 1, 2007**
- Funds expended by July 1, 2009**

# Summary of Allocations

Alternative Fuel Infrastructure	\$5.4 million
Biofuels Production	\$6.0 million
Plug-in Hybrids	\$5.0 million
Transit Buses	\$2.0 million
Alt Fuel Vehicle Incentives	\$1.8 million
Consumer Education/Outreach	\$1.6 million
Research and Testing	\$3.2 million
<b>Total Funding:</b>	<b>\$25.0 million</b>



# Summary

- ➡ **Gasoline likely to move from E6 to E10 in the next few years**
- ➡ **AB 1007/LCFS robust effort to address GHG and promote alternative fuels, including biofuels**
- ➡ **Test programs underway to set basis for setting fuel specifications and evaluating emissions performance**
- ➡ **Alternative fuel incentive program promotes biofuel infrastructure and production**