# **DOCKET**

09-ALT-1

DATE APR 30 2010

**RECD.** MAY 05 2010



## CALIFORNIA ENERGY COMMISSION

# Alternative and Renewable Fuel and Vehicle Technology Program

**FY 2010-2011 Investment Plan Advisory Committee Meeting** 

California Energy Commission Hearing Room A

April 30, 2010



#### CALIFORNIA ENERGY COMMISSION

## **Meeting Agenda**

- 9:00 Opening Remarks and Introductions

  James D. Boyd, Vice Chair and Presiding Member, Transportation Committee

  Anthony Eggert, Commissioner and Associate Member, Transportation Committee
- 9:20 Agenda Overview and Investment Plan Schedule (Leslie Baroody)
- 9:30 Program Update (Chuck Mizutani)
- 9:45 Key Changes in Second Staff Draft (Chuck Mizutani)
- 10:30 Advisory Committee Members Remarks and Discussion
- 12:00 Lunch
- 1:00 Advisory Committee Members Remarks and Discussion, Cont.
- 2:00 Public Comment (5 Minutes Each)



# **Tentative Schedule for Investment Plan Adoption**

- April 30 Second Advisory Committee Meeting
- May 20 Public Workshop (Long Beach)
- May 25 Public Workshop (Stockton)
- May 27 Public Workshop (San Francisco)
- Late June Posting of Committee Investment Plan
- Mid July Public Hearing on Committee Investment Plan
- Late July Business Meeting Adoption of Investment Plan

3



#### CALIFORNIA ENERGY COMMISSION

## **Program Update – Funding Summary**

- Workforce Development \$9,000,000
- ARRA Cost-Sharing \$36,520,000
  - Received federal contributions of \$93,632,000
- Closed PONs \$44,779,500
  - Biomethane production (\$21,479,500)
  - Medium- and heavy-duty vehicles (\$9,500,000)
  - Fuel infrastructure (\$13,800,000)
- Interagency Agreement with State Treasurer's Office
  - Master agreement for \$39,912,000
  - Open PON: New biofuel plants (\$14,912,000)
  - Open PON: Manufacturing (\$19,000,000)
  - Future: Existing ethanol producer's incentive (up to \$6M)



## **Anticipated Future Funding**

- Medium- and Heavy-Duty Vehicle Center of Excellence (\$6,600,000)
- Hydrogen Fueling Infrastructure (\$22,000,000)
- Propane School Bus Incentives (\$2,000,000)
- Sustainability Analysis (\$2,000,000)
- Division of Measurement Standards (\$4,000,000)
- Employment Training Panel (\$6,000,000)
- NREL and UCI Street Model (\$1,450,000)

5



#### CALIFORNIA ENERGY COMMISSION

# Summary of Key Changes to the Second Staff Draft of the 2010-2011 Investment Plan



## **Introduction**

- Summary of new financing options with the State Treasurer's Office (p.4)
  - CAEATFA: credit enhancements and reduction of bond issuance costs
  - CPCFA: loan-loss reserve account
- Description of methodology used in establishing funding priorities (p.5)
  - Forecasted 2020 and 2050 GHG reductions
  - Public and private funding gap analysis
  - Identified other, non-GHG categories
- New "Pathway to 2020 and 2050" section (pp.5-6)

7



#### CALIFORNIA ENERGY COMMISSION

## **Electric Drive**

- "Non-Road Applications" section incorporated into "Medium- and Heavy-Duty Vehicles" section (p.22)
- Updated information on charging times (p.25)
- Added section on "Battery Reuse" and efforts by PIER to identify and evaluate potential reuse strategies (p.27)





## **Electric Drive (Infrastructure)**

- EV community readiness and need for streamlined installation process for residential charging stations (p.24)
  - Energy Commission will consider funding education, workforce training, and staffing of local government entities as well as a strategic plan for establishing EV infrastructure in California.
- Residential electric vehicle supply equipment (EVSE) (p.25)
  - Current EVSE federal tax credit of 50% will expire at the end of 2010
  - Energy Commission will consider funding EVSE consumer rebates

9



#### CALIFORNIA ENERGY COMMISSION

## Hydrogen

- Importance of "refresher rates" in evaluating hydrogen fueling stations (p.38)
- Upcoming hydrogen solicitation will provide incentive for shorter fueling station construction timeline (p.39)
- For FY 08-10 funding, set aside \$3M (out of \$22M) for public transit hydrogen fueling stations (p.39)



## **Gasoline Substitutes**

- Identified multiple second-generation biofuels and their production processes (pp.40-41)
- More information on the Low-Carbon Fuel Standard (LCFS) (pp.41-42)

11



### CALIFORNIA ENERGY COMMISSION

## **Diesel Substitutes**

- Clearer distinction between issues related to biodiesel versus renewable diesel (pp.52,54)
- Updated information on ARB's research into possible NOx concerns for biodiesel and biodiesel blends (p.52)
- Under "Fuel Terminal Storage and Blending," provided information on need for fuel storage investments for domestic and foreign feedstocks (p.57)



## **Natural Gas**

• No significant changes were made to this section

13



## CALIFORNIA ENERGY COMMISSION

# **Propane**

• Outlined the potential role of propane (and renewable propane) in meeting the state's 2020 GHG reduction target (p.71-72)



# **Innovative Technologies and Advanced Fuels**

• Added "fuels directly from sunlight" (p.77)

15



## CALIFORNIA ENERGY COMMISSION

## **Market and Program Development**

• Added potential funding for small businesses to conduct full fuel cycle analyses for new fuel pathways (p.86)