



CALIFORNIA ENERGY COMMISSION

Investment Plan for the Alternative and Renewable Fuel and Vehicle Technology Program

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California Energy Commission

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Advisory Committee Meeting
April 6, 2009



Investment Plan Status

- This report of the Energy Commission Transportation Committee reflects input from:
 - Advisory Committee at the January 8, 2009 meeting
 - Comments in public docket
 - Four public workshops (200 attendees)
 - Discussions with ARB, CALTRANS, DGS, SWRCB, CALEPA, Resources Agency, CPUC, other state and local Agencies, and stakeholders
 - Decisions by the Transportation Committee



Investment Plan Status

- Revised report includes changes to Funding Allocation Section:
 - Highlight rationale/compelling need for incentives
 - Describe transition to achieve GHG emission reductions in 2020 and 2050
 - Identify barriers, market conditions, technology status, vehicle production timing and capabilities, and anticipated demand for alternative fuels and vehicles
 - Itemize funding allocation by fuel/technology



Investment Plan Status

- Post Committee Final Report on April 8, 2009
- Seek Energy Commission adoption at April 22, 2009 Business Meeting



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Funding Allocation Summary

| Fuel Technology Category | Fuel Production | Fuel Storage and Blending | Fueling Stations | Vehicle Incentives, Non-Road, and RD&D | Manufacturing Plants | TOTAL |
|-------------------------------------------------------|-----------------|---------------------------|------------------|----------------------------------------|----------------------|---------------|
| Electric Drive | | | \$12 Million | \$25 Million | \$9 Million | \$46 Million |
| Hydrogen | | | \$40 Million | | | \$40 Million |
| Ethanol | \$7 Million | | \$5 Million | | | \$12 Million |
| Renewable Diesel and biodiesel | \$2 Million | \$4 Million | | | | \$6 Million |
| Natural Gas | \$10 Million | | \$8 Million | \$25 Million | | \$43 Million |
| Propane | | | | \$2 Million | | \$2 Million |
| Total | \$19 Million | \$4 Million | \$65 Million | \$52 Million | \$9 Million | \$149 Million |
| TOTAL with \$27 Million for NON GHG Categories | | | | | | \$176 Million |



Electric Drive

- Provide rebates for 350 plug-in hybrid electric passenger vehicle retrofits for public fleets (\$3.5 million)
- Cost-share development of 10 medium- and heavy-duty hybrid vehicle prototypes (\$10 million)
- Support deployment of 125 projects for ports and truck stop electrification (\$11.5 million)
- Co-fund upgrade of existing charge points and installation of new electric charging at 6,500 total sites (\$12 million)
- Provide incentives for 5 manufacturing facilities and equipment (\$9 million)



Hydrogen

- Form public/private partnership to co-fund a minimum of 11 hydrogen fueling stations corresponding to OEM roll out of fuel cell vehicles and achieve 33 percent renewable hydrogen use requirement (\$40 million)



Ethanol

- Co-fund 20 ethanol feedstock and project feasibility studies for new plants (\$3 million)
- Cost-share 2 new pilot plants using waste feed stocks (\$4 million)
- Co-fund development of 50 E-85 fueling stations (\$5 million)



Renewable Diesel/Biodiesel

- Cost-share 5 production plants using waste feed stocks (\$2 million)
- Co-fund 2 fuel terminal storage and blending facilities (\$4 million)



Natural Gas

- Co-fund deployment of 700 medium-and heavy duty vehicles for ports, school districts, and public fleets (\$23 million)
- Provide rebates for 300 light duty public fleet vehicles (\$ 2 million)
- Cost-share 20 fueling stations (\$8 million)
- Co-fund development of 5 biomethane production plants (\$10 million)



Propane

- Provide rebates for 50 school buses and 100 light-duty vehicles for public fleets (\$2 million)



Non-GHG Categories

- Support 3 workforce training initiatives (\$15 million)
- Fund programs to develop sustainability best management practices, standards, verification procedures and technical research (\$4 million)
- Support public outreach and education programs (\$1 million)
- Fund 3 technical assistance contracts (\$1 million)
- Conduct environmental, technology and market assessments (\$2 million)
- Co-fund standards and certification for hydrogen, biodiesel, and underground storage tanks (\$4 million)



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