



Alternative and Renewable Fuel and Vehicle Technology Program

Advisory Committee Meeting

September 19, 2012

California Energy Commission
Hearing Room A



Agenda

10:00 Introductions and Opening Remarks

10:10 Program Status Update

11:15 Market and Technology Review

- Workforce Training
- Manufacturing
- Fuels Production and Upstream Distribution

12:00 Lunch



Agenda (cont.)

1:00 Market and Technology Review (cont.)

- Local Alternative Fuel Infrastructure
 - Natural Gas
 - Hydrogen
 - Electric Charging
- Advanced Technology Vehicle Demonstration
- Vehicle Deployment Incentives
- Emerging Opportunities

3:00 Public Comment



Organizational Updates

- Commission Staff Updates
 - Fuels and Transportation Division Deputy Director: Randy Roesser
 - Emerging Fuels and Technologies Office Manager: John Butler
 - ARFVTP Program Manager: Jim McKinney



Program Status Update

Jim McKinney
ARFVTP Program Manager



Summary of 2 Recent Investment Plan Allocations

	Project/Activity	2011-2012 Allocation	2012-2013 Allocation
Alternative Fuel Production	Biofuel Production and Supply	24	20
Alternative Fuel Infrastructure	Electric Charging Infrastructure	7	7.5
	Hydrogen Fueling Infrastructure	8.5	11
	E85 Fueling Infrastructure	5	1.5
	Natural Gas Fueling Infrastructure	8	1.5
	Propane Fueling Infrastructure	0.5	-
Alternative Fuel and Advanced Technology Vehicles	Natural Gas Vehicle Incentives	12	12
	Propane Vehicle Incentives	4	2
	Light-Duty PEV Incentives	-	5
	Medium- and Heavy-Duty Advanced Vehicle Technology Demonstration	8	6
Emerging Opportunities	Innovative Technologies, Advanced Fuels and Federal Cost-Sharing	3	5
Manufacturing	Manufacturing Facilities, Equipment and Working Capital	10	20
Workforce Training and Development	Workforce Training and Development Agreements	6.5	2.5
Market and Program Development	Regional Alternative Fuel Readiness and Planning	1	3
	Centers for Alternative Fuels and Advanced Vehicle Technology	-	3
	Sustainability Studies	0.5	-
	Technical Assistance and Analysis	2	-
Total Available		100	100



Potential Funding Modifications

- 2012-2013 Investment Plan Update
 - Budget Act reduced appropriation by \$10 million
 - Proposal: 10% reduction to all categories
- 2011-2012 Investment Plan – Propane Infrastructure
 - \$500,000 available; no applications received
 - Funds will support EV infrastructure project
- 2011-2012 Investment Plan – Sustainability Studies
 - \$500,000 reserved; no priority tasks identified
 - Funds will support MD/HD Vehicle Technology Demonstration



Recent Solicitations Update

- Advanced MD/HD Vehicle Technology Demonstration
 - Revised Notice of Proposed Awards (NOPAs) released on April 19 and April 27
 - Backfilled funding for additional hybrid and ZEV demonstration projects
 - In total, \$22.3 million for 14 demonstration projects
 - Roughly \$4.5 million remaining in unfunded requests for passing projects



Recent Solicitations Update

- Biofuels Production Facilities
 - Round 1 NOPA released March 23
 - \$19.5 million toward 7 projects
 - About 7.7 million GGE/DGE produced per year
 - Most common feedstocks: used cooking oil, organic MSW
 - Round 2 NOPA expected shortly
- Advanced Vehicle Technology Manufacturing
 - NOPA released June 20
 - \$19.8 million toward 4 projects



Recent Solicitations Update

- Alternative Fuels Infrastructure
 - Round 1 NOPA released on April 25
 - Round 2 NOPA released on August 16
 - \$4.7 million for 1,011 charging points
 - 28 DC charging points
 - 59 fleet charge points
 - 806 single- and multi-family residential charging points
 - 118 workplace charging points



Recent Solicitations Update

- Alternative Fuels Infrastructure, cont.
 - \$11.5 million for 125 E85 fueling stations
 - One partially funded proposal, and one unfunded proposal
 - Some categories undersubscribed
 - \$6.9 million (out of \$9.6 million) for 23 CNG and LNG infrastructure projects
 - \$1.1 million (out of \$3.1 million) for 3 biodiesel infrastructure projects
 - \$0 (out of \$500,000) for propane infrastructure projects



Draft Solicitation

- DRAFT Hydrogen Fueling Infrastructure Solicitation
 - Developed with public input from 3 summer workshops
 - Up to \$29.7 million available
 - Comments were requested by September 17
 - Release of actual solicitation expected soon



Future Solicitations

- New solicitations expected through June 2013
 - Hydrogen Fueling Infrastructure
 - Charging Infrastructure
 - NG Infrastructure
 - MD/HD Vehicle Technology Demonstration
 - Regional Planning
 - Centers for Alternative Fuels
 - Emerging Opportunities



Policy Updates

- Legislative Policy
 - SB 1455 (Kehoe)
 - Did not pass before end of legislative session
 - Extend ARFVTP, AQIP, and Carl Moyer program through 2023
 - Preempt Clean Fuels Outlet regulation for hydrogen fueling infrastructure
 - Set ARFVTP funding aside for hydrogen
 - Establish additional reporting requirements



Policy Updates

- Legislative Policy, cont.
 - AB 1900 (Gatto, et al.)
 - Passed by Legislature; on Governor's desk
 - Requires the Public Utilities Commission to do the following:
 - Develop testing protocols for landfill gas
 - Adopt standards for biomethane injection into natural gas pipelines
 - Ensure open, nondiscriminatory pipeline access



Policy Updates

- Legislative Policy, cont.
 - AB 523 (Valadao)
 - Signed into law by Gov. Brown
 - July 1, 2013 – Prohibits ARFVTP funding for ethanol production from edible corn feedstocks
- Regulatory Policy
 - LCFS credit discounting (20 CCR 3103)
 - Considering review, based on industry feedback
 - Possible Order Instituting Rulemaking



Policy Updates

- Executive Order B-16-2012
 - Signed by Gov. Brown in March 2012
 - Directs state agencies to help expand the market for ZEVs
 - Establishes milestones for 2015, 2020, and 2025
 - 2025 goal: 1.5 million ZEVs
 - 2012 ZEV Action Plan will be presented at a Governor's Office Summit on ZEVs (September 28)



Development of 2013-2014 Investment Plan Update

- Advisory Committee Membership
 - Maintaining current membership
 - Environmental Justice representation
- Receiving Stakeholder Input
 - Two additional Advisory Committee meetings planned
 - Open docket for comment (12-ALT-2)
 - See (<http://www.energy.ca.gov/2012-ALT-2/background.html>) for instructions on submitting comments



Development of 2013-2014 Investment Plan Update

- Tentative Schedule
 - December: Release of Staff Draft
 - January: Advisory Committee Meeting
 - March: Release of Revised Draft
 - March: Advisory Committee Meeting
 - April: Release Final Draft
 - May: Adoption at Business Meeting



Questions?



Market and Technology Review

- 1.) Workforce Training
- 2.) Manufacturing
- 3.) Fuels Production and Upstream Distribution
- 4.) Local Alternative Fuel Infrastructure
- 5.) Advanced Technology Vehicle Demonstration
- 6.) Vehicle Deployment Incentives
- 7.) Emerging Opportunities



Reference Tables



Program Allocations Over 5 Fiscal Years: \$456.6 Million

Funding Area	Amount (\$ millions)	Percent of Total Funding (%)
Alternative Fuel Infrastructure	120.6	26.4
Biofuels Production	108.7	23.8
Vehicle & Component Manufacturing	55.9	12.2
Vehicle Deployment	62.9	13.7
Advanced Medium and Heavy Duty Vehicle Demonstrations	43.9	9.6
Workforce Training and Development	24.8	5.4
Program Technical Support	39.8	8.7
Total	456.6	99.8*

*Does not total 100% due to rounding



Encumbered Contracts by Funding Category Through June 2012

Fuel Type and Program Area	Total Funding Encumbered by June 2012 (\$ millions)	Percent of Total Funding (%)	No. of Awards
Electric Drive	87.6	35.3	46
Biofuels	70.5	28.4	36
Natural Gas and Propane	33	13.3	19
Hydrogen	22.7	9.2	5
Workforce Development	15.8	6.4	3
Program Support & Other	18.7	7.5	13
Totals	248.3	100.1*	122

*Does not total 100% due to rounding