



Alternative and Renewable Fuel and Vehicle Technology Program

**2012 Green Vehicle Funding Workshop
Fairfield Community Center
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Alternative and Renewable Fuel and Vehicle Technology Program (AB118)

Purpose

To transform California's transportation market into a diverse collection of alternative fuels and technologies and reduce California's dependence on petroleum.

“...develop and deploy innovative technologies that transform California’s fuel and vehicle types to help attain the state’s climate change policies.” (Health and Safety Code Section 44272(a))

Up to \$150 Million in Annual State Funding Program

The Energy Commission will receive **\$100 million/year for 7 years** to implement the ARFVT Program: Fuel production, Infrastructure, Trucks

California Air Resources Board will receive **\$40 million/year for over 7 years** for *Enhanced Fleet Modernization* and *Air Quality Improvement*: Light Duty Vehicle, Buses and Trucks.



Investment Plan

- Annual Investment Plan establishes funding priorities for ~\$100 million per year
 - Advisory panel provides guidance from broad cross section of California stakeholder groups
 - Allow members of the public to participate in funding allocation process
 - Direct program activities to assist in achieving state policy goals
 - Describes how funding will be used to complement other public and private investments



AB 118 Funding and Objectives

- Invest in a portfolio of alternative low-carbon and renewable fuels and advanced vehicles in California to help meet our energy, environmental, and economic goals.
- Alternative fuel production, distribution and dispensing
- Alternative technology vehicle development and manufacturing (EVs, CNG/LNG, Fuel Cell, Flex Fuel)
- Workforce training
- Education and outreach
- Environmental, market and technology assessments



Program Investments by Funding Category

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
Gaseous Fuels (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		122



ARFVT Progress (Funded through October 2012)

	Fuel Area	Existing 2009-2010 Baseline Levels	Additions from ARFVT Program Funding	Percent Increase
Alternative Fueling Infrastructure	Electric	1,270 charging stations	5,224 charging stations (public, fleet, and workplace)	411%
	E85	39 fueling stations	200 fueling stations	513%
	Natural Gas	443 fueling stations	44 stations	10%
	Hydrogen	6 public fueling stations <i>(plus 5 more under construction)</i>	11 fueling stations	100%
Alternative Fuel Vehicles	Electric Cars	13,268	379	3%
	Electric Trucks	1,409	160	11%
	Natural Gas Trucks	13,995	1,472	11%



Alternative Fuels Fueling Infrastructure (as of October 2012)

- Natural Gas Stations - \$12.94 million
 - 44 fueling stations
- E85 Stations - \$16.45 million
 - 200 retail fueling stations
- Hydrogen Stations - \$18.7 million
 - 11 fueling stations
- Biodiesel Infrastructure - \$4.36 million
 - 4 wholesale distribution facilities



PEV Charging Infrastructure Awarded on August 16, 2012

Category	Charge Points	Funding
DC Fast Charge	27	\$1,400,554
Residential	806	\$2,499,512
Workplace	118	\$420,481
Fleet	59	\$335,921
TOTAL	1,010	\$4,656,468



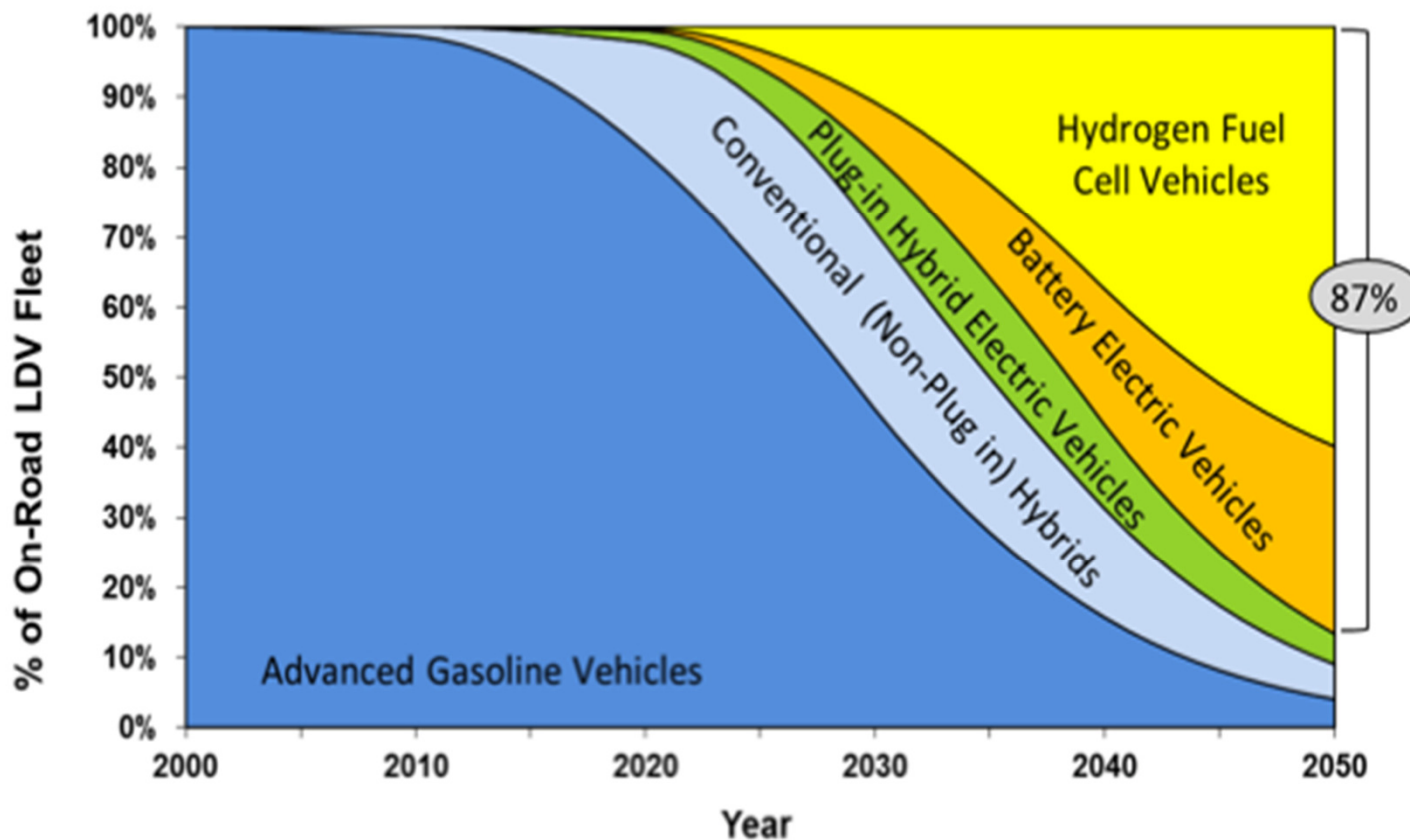
Energy Commission Investment in Vehicle Deployment

- Energy Commission Natural Gas & Propane Vehicle Buy-Down Program
 - \$15.5 million – Natural gas vehicles
 - \$680,000 – Propane school buses
 - \$756,000 – Other propane vehicles
- \$2 million – Additional funding added to Clean Vehicle Rebate Program (CARB)
 - 379 Nissan Leafs



On Road Light-Duty Vehicle 2050 Vision

Figure 1. On Road Light-Duty Vehicle Scenario to Reach 2050 Goal





Estimated Job Creation from ARFVT

	Manufacturing	Construction	Engineering	Operation and Maintenance	Other	Total
Short-Term	416	610	241	55	590	1,912
Long-Term	638	1,306	384	410	744	3,482
Total	1,054	1,916	625	465	1,334	5,394



Thank you!

**Additional Information
CEC DRIVE Website**

<http://www.energy.ca.gov/drive/>

CARB Drive Clean Website

<http://www.DriveClean.ca.gov>

**Alternative and Renewable Fuel and Vehicle
Technologies Program:**

FY 2012-13 Investment Plan

<http://www.energy.ca.gov/2011-ALT-1/documents/index.html>

FY 2013-2014 Investment Plan

<http://www.energy.ca.gov/2012-ALT-2/>

For more information : email AB118@energy.ca.gov