California Vehicle Incentives

Green California Summit

April 21, 2015

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Center for Sustainable Energy™

Our Mission:

Accelerate the transition to a sustainable world powered by clean energy

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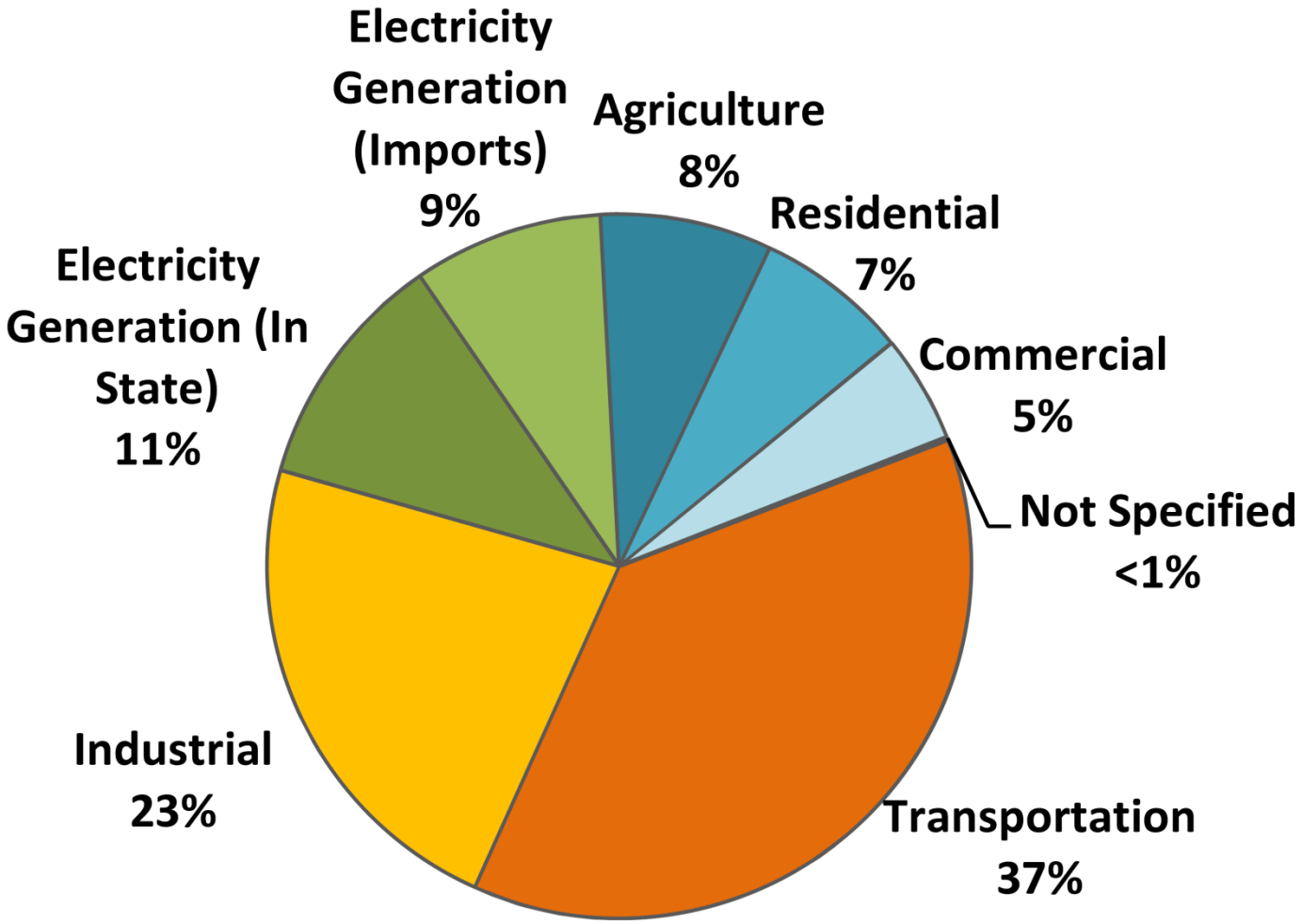
Agenda

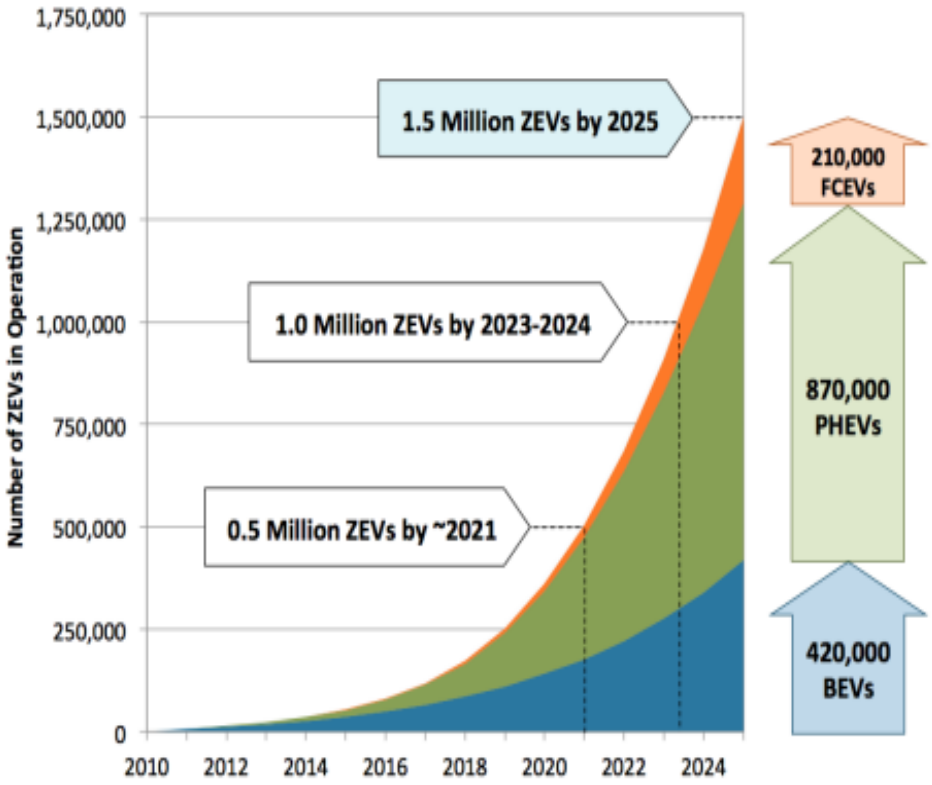
- Policy Context
- Light-Duty Incentives
- Medium-Heavy Duty Incentives
- Other Funding
- Conclusions

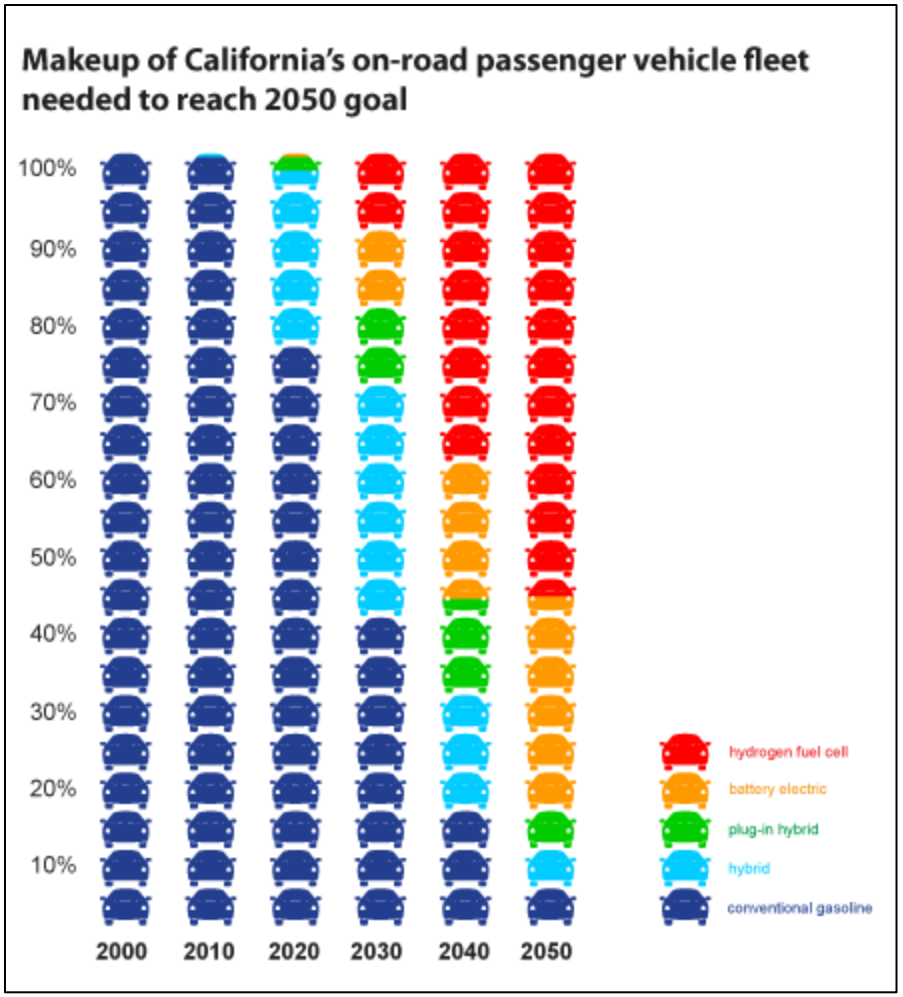
Policy - Where we are at



2013 Total CA Emissions: 459.3 MMTCO2e

Policy- Where we need to go





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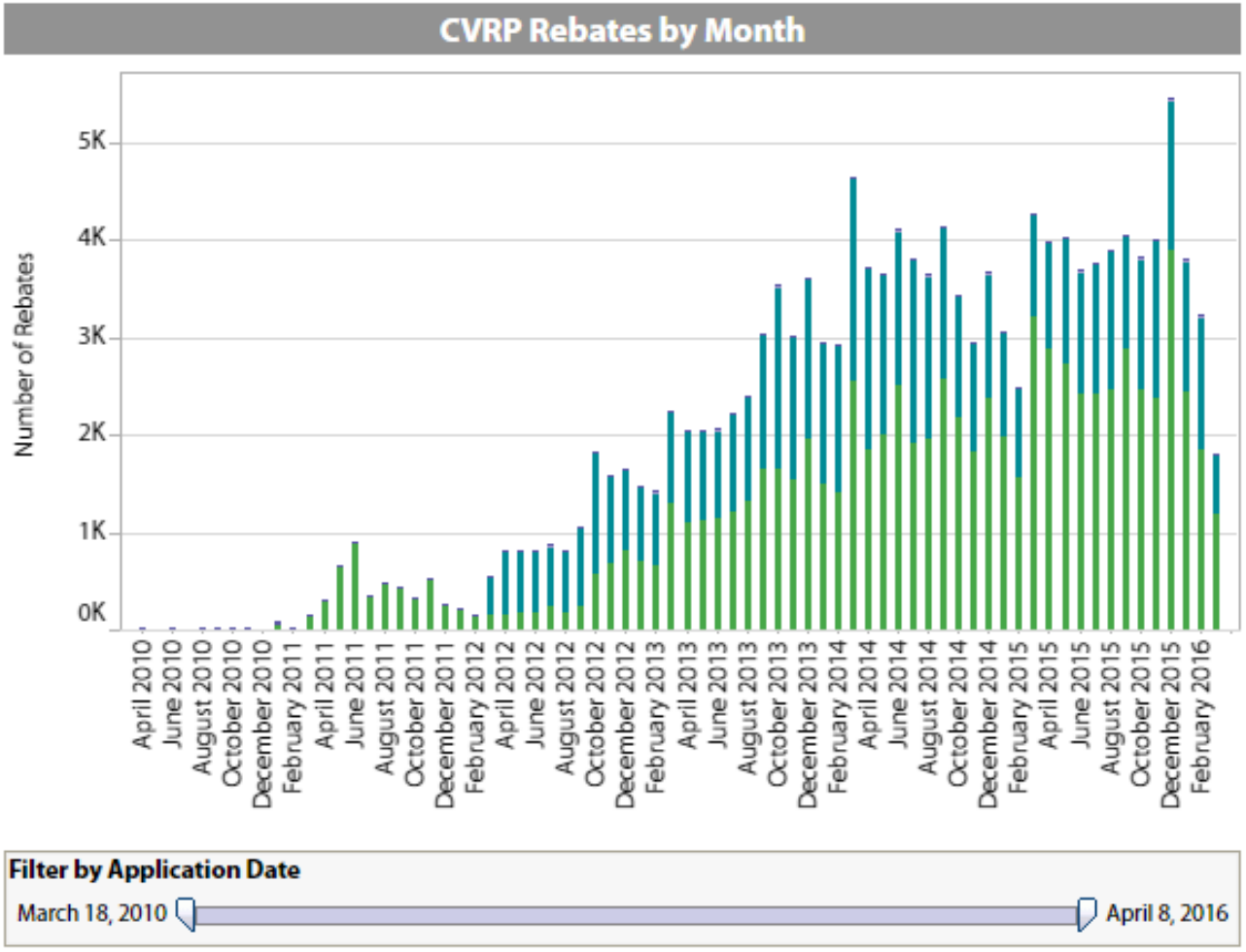
Rebate Statistics



Vehicle Category

BEV PHEV FCEV Other

BEV	Highway capable, four-wheeled, all-battery electric vehicle
PHEV	Highway capable, four-wheeled, plug-in hybrid electric vehicle (electricity & gasoli..
FCEV	Fuel-cell electric vehicle
Other	Non-highway, motorcycle & commercial BEVs

Rebates & Rebate Funding Issued & Approved to Date - Life of Project

	Rebates	Funding
BEV	85,040	216,323,208
PHEV	58,277	87,335,076
FCEV	178	812,500
Other	617	1,534,950
Grand Total	144,112	306,005,734

https://cleanvehiclerebate.org/eng/rebate-statistics

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Clean Vehicle Rebate Project (CVRP)

California Environmental Protection Agency
Air Resources Board

Post-delivery rebates for new electric vehicles (EVs) bought or leased statewide:

- **$5,000** for fuel-cell EVs
- **$2,500** for all-battery EVs
- **$1,500** for plug-in-hybrid EVs
- **$900** for motorcycle & neighborhood EVs

CVRP Requirements

- Take delivery prior to application
- New vehicles only
- Registered with CA DMV
- Purchases or leases of at least 30 months

CVRP – Public Fleets

- Federal, state or local government entity based in CA
- 30 rebates per fleet per calendar year
- “Fleet” defined by Taxpayer Identification Number
- Increased incentives available to **state and local public agencies** through the new Public Fleet Pilot Project

Public Fleet Pilot Project

Increased Incentives for Public Fleets in Disadvantaged Communities

- Local and state agencies in disadvantaged communities
- New vehicle **purchases** on or after July 1, 2014
- Reserve rebate funds up to 6 months prior to vehicle delivery

California Environmental Protection Agency
Air Resources Board

$15,000 for fuel-cell electric vehicles

$10,000 for battery-electric vehicles

$5,250 for plug-in-hybrid electric vehicles

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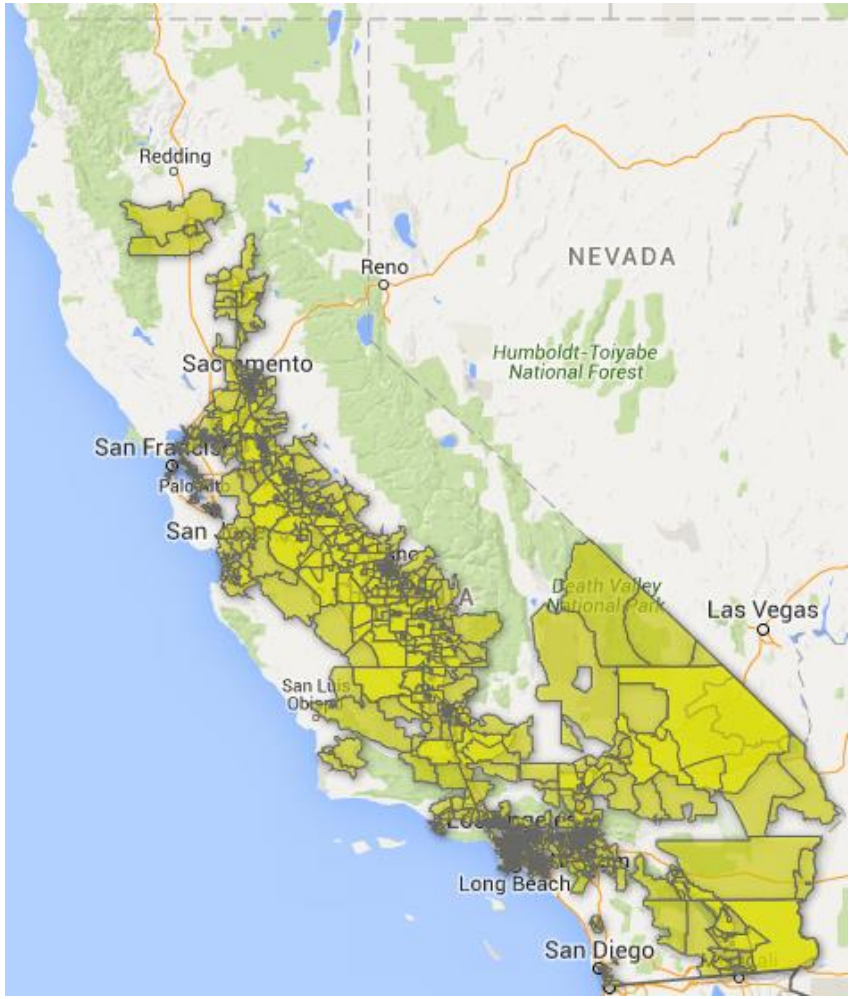
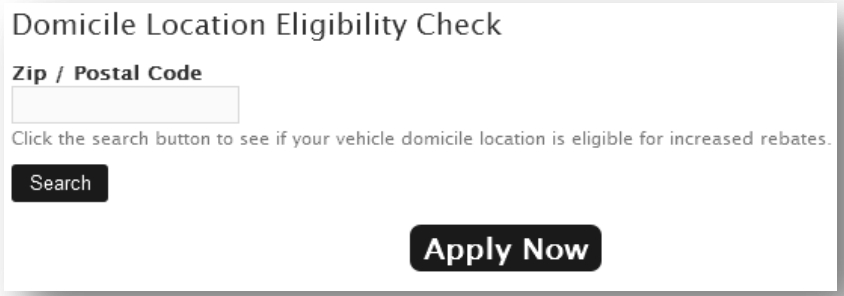
Public Fleet Pilot Project - Eligibility



- CalEPA's CalEnviroScreen model
- ZIP code of vehicle domicile facility
- Check your ZIP code at cleanvehiclerebate.org/PFP



http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/535zipmap.htm

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Increase Your Savings

The Public Fleet Pilot Project rebate **can** be combined with:

- Local air district funding
- State or federal grants

(more info at driveclean.ca.gov)

It **cannot** be combined with:

- Standard CVRP rebate
- Federal tax credit

CVRP and PFP Requirements

Project Parameter	Standard CVRP	Public Fleet Pilot Project
Eligible Fleet Types	Public and Private	Public - State and Local
Locations eligible	Statewide	Disadvantaged Communities
Pre-delivery reservations	No	Optional
NEVs/ZEMs eligible	Yes	No
Leases eligible	Yes	No

CVRP and PFP Incentives

Technology Type	Standard CVRP	Public Fleet Pilot Project
Fuel-cell EV	$5,000	$15,000
All-battery EV	$2,500	$10,000
Plug-in hybrid EV	$1,500	$5,250
NEV/ZEM	$900	N/A

HVIP

The California Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) is a streamlined program to help speed the early market introduction of clean, low-carbon hybrid and electric trucks and buses.

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HVIP Incentives- Zero Emissions

GVWR (lbs)	Base Vehicle Incentive		
	1 to 100 vehicles[1]		101 to 200 vehicles
	Outside DC[2]	Within DC[2]	
5,001 – 8,500	$20,000	$25,000	$12,000
8,501 – 10,000	$25,000	$30,000	$18,000
10,001 – 14,000[3]	$50,000	$55,000	$30,000
14,001 – 19,500	$80,000	$90,000	$35,000
19,501 – 26,000	$90,000	$100,000	$40,000
> 26,000	$95,000	$110,000	$45,000

1 - The first three vouchers received by a fleet, inclusive of previous funding years, are eligible for the following additional funding amount: $2,000/vehicle if below 8,501 lbs; $5,000/vehicle if 8,501 to 10,000 lbs; and $10,000/vehicle if over 10,000 lbs.

2 – 'DC' refers to a disadvantaged community.

3 - This weight range is not intended for vehicles utilizing a pick-up truck chassis/platform typically found in vehicles below 10,001 lbs GVWR. Vehicles at the lower end of the 10,001 to 14,000 lbs weight range will be evaluated on a case-by-case basis to determine eligibility for the full Base Vehicle Incentive.

HVIP Incentives- Hybrids

GVWR (lbs)[1]	Base Vehicle Incentive	
	1 to 100 vehicles[2]	101 to 200 vehicles
6,001 – 8,500 (plug-in hybrids only)[3]	$ 8,000	$ 6,000
8,501 – 10,000 (plug-in hybrids only)[3]	$10,000	$ 8,000
10,001 – 19,500	$15,000	$10,000
19,501 – 33,000	$20,000	$12,000
33,001 – 38,000	$25,000	$15,000
> 38,000	$30,000	$20,000

1 - Tractor trailers utilize Gross Combined Vehicle Weight for purposes of determining Base Vehicle Incentive.
2 - The first three HVIP vouchers received by a fleet, inclusive of previous funding years, are eligible for the following additional funding amount: $2,000/vehicle if below 8,501 lbs; $5,000/vehicle if 8,501 to 19,500 lbs; and $10,000/vehicle if over 19,500 lbs.
3 - Vehicle must be ARB-certified as an Ultra-Low Emission Vehicle. Voucher amount is increased by $2,000 for each of the following: ARB-certification as a Super Ultra Low Emission Vehicle and ARB-certification for zero-evaporative emissions.

Energy Commission Funding

Table 3: Previous ARFVTP Awards as of December 31, 2015

Category	Funded Activity	Cumulative Awards to Date (in millions)*	# of Projects or Units
Alternative Fuel Production	Biomethane Production	$50.9	16 Projects
	Gasoline Substitutes Production	$27.2	14 Projects
	Diesel Substitutes Production	$57.4	20 Projects
Alternative Fuel Infrastructure	Electric Vehicle Charging Infrastructure	$40.7	7,490 Charging Stations
	Hydrogen Refueling Infrastructure	$96.0	49 Fueling Stations
	E85 Fueling Infrastructure	$13.7	158 Fueling Stations
	Upstream Biodiesel Infrastructure	$4.0	4 Infrastructure Sites
	Natural Gas Fueling Infrastructure	$21.0	65 Fueling Stations
Alternative Fuel and Advanced Technology Vehicles	Natural Gas Vehicle Deployment**	$56.4	2,809 Vehicles
	Propane Vehicle Deployment**	$6.0	514 Trucks
	Light-Duty Electric Vehicle Deployment	$25.1	10,700 Cars
	Medium- and Heavy-Duty Electric Vehicle Deployment	$4.0	150 Trucks
	Medium- and Heavy-Duty Vehicle Technology Demonstration and Scale-Up	$93.7	44 Demonstrations
Related Needs and Opportunities	Manufacturing	$57.0	22 Manufacturing Projects
	Emerging Opportunities	†	†
	Workforce Training and Development	$27.7	83 Recipients
	Fuel Standards and Equipment Certification	$3.9	1 Project
	Sustainability Studies	$2.1	2 Projects
	Regional Alternative Fuel Readiness and Planning	$7.6	34 Regional Plans
	Centers for Alternative Fuels	$5.8	5 Centers
	Technical Assistance and Program Evaluation	$5.6	n/a
Total		**$606.0**	

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Energy Commission Funding

Table 4: Most Recent and Current Proposed Investment Plan Allocations (in millions)

Category	Funded Activity	2014-2015	2015-2016	2016-2017 (Proposed)
Alternative Fuel Production	Biofuel Production and Supply	$20	$20	$20
Alternative Fuel Infrastructure	Electric Charging Infrastructure	$15	$17	$17
	Hydrogen Refueling Infrastructure	$20	$20	$20
	Natural Gas Fueling Infrastructure	$1.5	$5	$2.5
Alternative Fuel and Advanced Technology Vehicles	Natural Gas Vehicle Incentives	$10	$10	$10
	Light-Duty Electric Vehicle Deployment	$5	-	-
	Medium- and Heavy-Duty Vehicle Technology Demonstration and Scale-Up	$15	$20*	$23*
Related Needs and Opportunities	Manufacturing	$5		
	Emerging Opportunities	$6	$3	$3
	Workforce Training and Development Agreements	$2.5	$3	$2.5
	Regional Alternative Fuel Readiness and Planning	-	$2	$2
Total		**$100**	**$100**	**$100**

Source: California Energy Commission. *See the text of these respective sections in Chapters 5 and 6 for details on the combination of these funding allocations.

http://www.energy.ca.gov/contracts/transportation.html

Available Incentives

Federal Programs	Details
Alternative Fuel Infrastructure Tax Credit	Commercial fueling equipment eligible for a 30% tax credit up to $30,000.
CARB Programs	**Details**
Carl Moyer Memorial Air Quality Standards Attainment Program	Funding for cleaner on-road, off-road, marine, locomotive, agricultural vehicles being scrapped
Proposition 1B: Goods Movement Emissions Reduction Program	Financial incentives to owners of cleaner technology equipment used in freight movement
Light duty pilot projects in disadvantaged communities	EEFMP plus-up, car sharing, financing, vanpools
Heavy Duty investments	Advanced technology demonstrations, pilot deployments, low NOx engines, financing

Conclusions

- California has aggressive clean vehicle policies
  - Driven by climate and air quality concerns
- High level of consumer adoption of Light Duty ZEV, but more is needed
- Generous incentives for MD/HD ZEVs
- Fleets must get ready to take advantage of programs before they become mandates.


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