Clean Energy Workforce Training Program

California Energy Commission

Alternative and Renewable Fuel and Vehicle Technology Program

Program Overview

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California Energy Commission

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Alternative and Renewable Fuel and Vehicle Technology Program

Creation

- Assembly Bill 118 (Nunez, Chapter 750, Statutes of 2007)
- Subsequently amended by AB 109 (Nunez, Chapter 313, Statutes of 2008).

Purpose

- Develop and deploy renewable alternative fuels and clean vehicle technologies into the marketplace
- Assist in attaining California's climate change policies
- Provide immediate GHG reduction benefits

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Sample of projects eligible to receive funding include:

- Alternative and renewable low-carbon fuels development and improvement
- Optimize alternative and renewable fuels for existing and developing engine technologies
- Produce alternative and renewable low-carbon fuels in California
- Expand fuel infrastructure, fueling stations, and equipment

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Sample of projects eligible to receive funding (Continued)

- Improve light, medium, and heavy-duty vehicle technologies
- Retrofit medium and heavy-duty on-road and non-road vehicle fleets
- Decrease the overall impact and carbon footprint of alternative and renewable fuels and increase sustainability
- Establish workforce training programs, and create technology centers

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Project Funding Preferences

- Reduce lifecycle environmental impacts, including air and water pollution
- Decrease lifecycle greenhouse gas emissions by at least 10%
- Do not adversely impact the sustainability of the state's natural resources
- Use alternative fuel blends of at least 20 %
- Use existing or proposed fueling infrastructure
- Provide non-state matching funds
- Provide economic benefits for California
- Drive new technology advancement

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Program and Market Development Categories

- Support development of sustainability best management practices, standards, verification programs, and technical research
- Co-fund programs to educate Californians on available fuel and clean vehicle options
- Fund analysis and program activities
- Support workforce training initiatives with employers, manufacturers, training programs, and government agencies

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Program Investment Plan

The Energy Commission is required to develop an investment plan to determine funding priorities.

- An advisory committee is formed to provide input during the development of each investment plan.
- The initial investment plan was adopted in April 2009
- The investment plan is revised and re-adopted annually.
- The next Investment Plan is currently being developed

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Fuel / Technology	2-Year Funding Allocation (million)
Electric Drive	$46
Hydrogen	$40
Ethanol	$12
Renewable Diesel/Biodiesel	$6
Natural Gas (Includes $10 M for Biomethane)	$43
Propane	$2
Market Development and Program Support	$27
Total	**$176**

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AB 118 Cost Share for California ARRA Projects

CEC awarded $37.25million in match-funding under the following categories:

Category	Project	CEC Funding Amount
Electric Drive	Medium and Heavy-Duty Hybrid Vehicle Demonstration	$9 million
	Charging Stations	$8.8 million
	Manufacturing Facilities	$1 million
Ethanol	E-85 Fueling Stations	$4 million
Natural Gas	Medium- and heavy Duty Vehicles for Ports, Schools, and Others	$11.5 million
	Fueling Stations	$2.4 million
Market Development		$0.55 million

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Clean Transportation Workforce Development and Training

The transformation of California's large and complex petroleum-based fuels market, to one based on a diverse supply low-carbon renewable alternative fuels and clean vehicles, requires a well-trained workforce.

Workforce Development and Training Goals

- Develop a workforce strategy focused on addressing current and future industry needs
- Utilize California's existing network of workforce development agencies and organizations
- Establish partnerships with lead workforce development organizations

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Sample of workforce training eligible for funding:

- Alt & Renew Fuel Feedstock Production & Extraction
- Renewable Fuel Production
- Renewable Fuel Distribution
- Renewable Fuel Transport
- Renewable Fuel Storage
- High-Performance & Low Emission Vehicle Technology
- High Power Electronics
- Automotive Computer Systems
- Mass Transit Fleet Conversions
- Mass Transit Fleet Servicing and Maintenance and
- Other Sectors or Occupations Related to ARFVTP Purpose

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- Executed Agreements:
  - Employment Development Department ($4.5M)
    - Labor Market Data
    - California Workforce Investment Board – Industry Cluster development and implementation
    - Local workforce development and training delivery
    - Inform job seekers of training opportunities
    - Monitor trainee movement through the system, track and report training and employment results
  - California Community College Chancellor's Office ($4.5M)
    - ATTE: curriculum development, train the trainer, training delivery, and CC program implementation
    - COEs: Environmental Scans specific to clean transportation Industry

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- **Inter-Agency Agreement in Development**:

  Employment Training Panel ($5M)

Clean transportation workforce training contracts

- The Employment Training Panel (ETP) is a business and labor supported state agency
- The ETP is a performance-based program
- The ETP contracts with employers, training agencies, vocational schools

We anticipate this inter-agency agreement will be in place Spring 2010

ARFVTP Funding Opportunities

- Solicitations for 2007-2009 ARFVTP funding are currently being developed.
- Funding will be available in the following categories:
  - Vehicle Rebates for PHEVs, Natural Gas, and Propane Vehicles
  - Medium-Heavy Duty Hybrid demonstration projects
  - Fuel Infrastructure
  - Biomethane
  - Fuel Production and Manufacturing Plants

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Recently released funding opportunities

- **Program Opportunity Notices**
  (PON-09-003, PON-09-004, PON-09-006)
- **Solicitation Packages**
  - Biomethane Production for Transportation - **PON-09-003**
  - Medium and Heavy-Duty Advance Vehicle Technology - **PON-09-004**
  - Alternative and Renewable Fuels Infrastructure **- PON-09-006**

Applicant Workshop December 15, 2009

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