



Transit Opportunities in the Alternative and Renewable Fuel and Vehicle Technology Program (AB 118)

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September 28, 2010



California Nation-State Statistics

- Population: 36.8 million
- GDP: \$1.8 trillion - 8th largest global economy
- GHG Emissions: 469 MMT (ARB 2008)
 - 7.2% of U.S. Emissions (Pew Center)
 - 10th largest emitter on global scale
 - **Transportation accounts for 38 % of all GHG emissions**
- Vehicles: 26.3 million cars + 0.92 million trucks
- Annual Fuel Consumption: 20 billion gallons
 - 16 billion gallons gasoline (>1 billion gallons ethanol E10)
 - 4 billion gallons diesel
 - **3rd largest consumer of vehicle fuels after China and US**



AB 118 Basics

Alternative and Renewable Fuel and Technology Program

- **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))

- **\$1.5 Billion State Funding Program**

For the *Alternative & Renewable Fuel and Vehicle Technology Program*, the Energy Commission will receive **\$100 million/year for over 7 years**.

California Air Resources Board will receive **\$50 million/year for over 7 years** for *Enhanced Fleet Modernization and Air Quality Improvement*.



Investment Plan

- The Energy Commission is required to develop and adopt the Investment Plan and to update it annually.
- The Investment Plan determines the priorities and opportunities for the Program.
- The Energy Commission must consult with an Advisory Committee as it develops its Investment Plan.
- Recently approved the Investment Plan which will guide our investments for 2010-2011.
- Opportunity for stakeholder input.



Program Funding Summary for Fiscal Year (FY) 2008-2010

- **ARRA Cost-Sharing - \$36.52 million**
Received federal contributions of \$105.3 million and \$113.3 million in private funds
- **Additional Program Opportunity Notices (PONs) and agreements- \$124.4 million**
- **Upcoming solicitations- \$14.65 million**



ARRA Cost-Sharing - \$36.52 million

- Install 3,891 electric vehicle charging sites
- Demonstrate over 800 medium- and heavy-duty natural gas and hybrid-electric trucks.
- Develop high energy density lithium-ion batteries
- Provide public outreach and education to promote the deployment of heavy-duty natural gas vehicles



Closed PONs- \$124.4 million

- Biomethane production (\$21.5 million)
- Alternative and renewable fuel infrastructure (\$9.5 million)
- Medium- and heavy-duty vehicles (\$13.8 million)
- Manufacturing facilities for electric vehicles, alternative vehicles, vehicle components and batteries (\$19 million)
- Biofuel production plants (\$15 million)
- Hydrogen fueling infrastructure (\$19 million)
- Ethanol production incentive programs (\$6 million)
- Hydrogen dispensing equipment certification (\$4 million)
- Workforce training and development programs (\$15 million)
- Conversion of state-owned hybrid-electric vehicles to plug-in electric vehicles (\$600,000)
- Technical assistance for Program administration (\$1 million)



Awarded Transit Projects

- Foothill Transit
- Sacramento Regional Transit District
- San Diego Metropolitan Transit System
- EV Connect and LA Metro
- ISE
- Motiv Power



Funding Allocation Summary for FY 2010-2011 Investment Plan

Battery Electric Drive	\$24.5 million	
Hydrogen Electric Drive	\$13 million	
Gasoline Substitutes	\$16.5 million	
Diesel Substitutes	\$9 million	
Natural Gas	\$22 million	
Propane	\$3 million	
Innovative Technologies/Advanced Fuels	\$8 million	
Market and Program Development	\$12 million	

Total	\$108 million	*

*Up to 2% of total allocation will be for measurement, verification and evaluation (taken from each category on a prorated basis).



Next Steps

- Solicitations for the 2010-2011 Investment Plan to be developed over next several months.
- Development of the 2011-2012 Investment Plan.



Transit Opportunities

- Get connected
- Inform discussion for Investment Plan
- Apply for \$\$



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