

# AB 118: Air Quality Improvement Program

## Public Workshop

Sacramento, CA  
February 4, 2009

Fresno, CA  
February 5, 2009



1



## Overview

- Summary of AB 118
- Draft AQIP Guideline Language
- FY 2009-10 AQIP Funding Plan Discussion Paper
- Questions and Comments

2



## AB 118 Programs

- CEC's Alternative and Renewable Fuels and Vehicle Technology Program
  - \$120M/year for clean fuels and vehicle technology to address climate change
- BAR's Enhanced Fleet Mod Program
  - \$30M/year for car/light truck scrap
- ARB's Air Quality Improvement Program
  - \$50M/year to reduce criteria pollutants

3

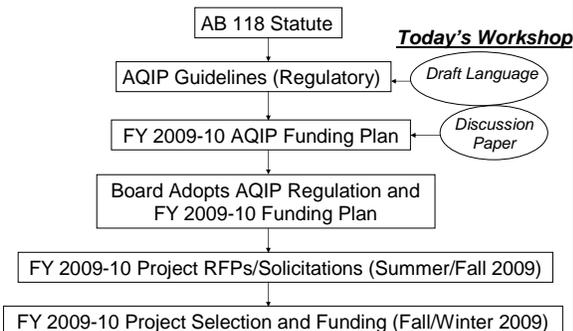


## AQIP Project Categories

- Vehicle and equipment projects
  - Accelerated deployment
  - Technology demonstration
- Research to determine the air quality impacts of alternative fuels
- Advanced technology workforce training



## AQIP Development



4



## AQIP Guidelines Overview

- Adopted as regulations
- Describe general program administration and implementation requirements
- Apply to multiple funding years and project types



6



## Draft AQIP Guidelines Funding Plan Development

- Staff develops a Proposed Funding Plan each fiscal year
  - Reflect evolving funding needs and policy priorities
  - Opportunities for public input
- Board approves Funding Plan

7



## Draft AQIP Guidelines Funding Plan Components

- Eligible project categories and funding targets
- Project selection criteria
- Project administrators
  - ARB or third party



## Draft AQIP Guidelines Project Solicitations

- Tailored specifically for each project category in the Funding Plan
- Include detailed project requirements
  - Eligibility and selection criteria
  - Application process and selection timeline
  - General grant requirements
  - Match and program administration

9



## Draft AQIP Guidelines Additional Regulatory Language

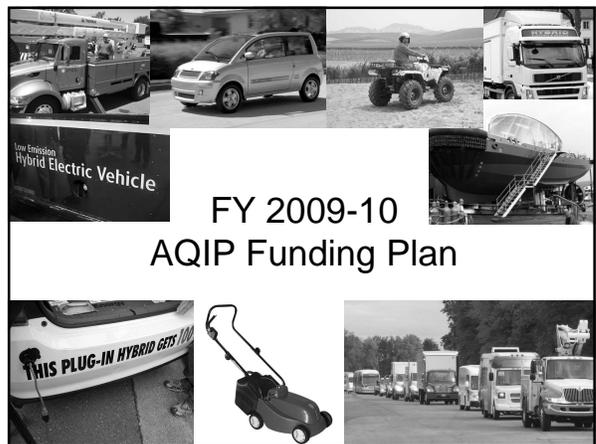
- Administrative requirements
- Compliance with “anti-backsliding” guidelines
- Oversight and accountability responsibilities
- Reporting requirements
- Other suggestions?



## Comments and Discussion



11

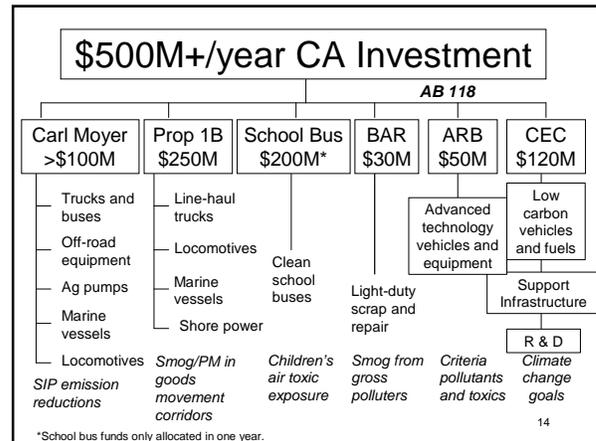




## FY 2009-10 Funding Plan Proposed Guiding Principles

- Help meet SIP “black box” commitments
- Must be ready for deployment
- Induce clean vehicle purchases that wouldn't otherwise have occurred
- Target project types without other significant funding sources

13



## AQIP Funding Targets Draft FY 2009-10 Funding Plan

Project Category	Funding Amount
Hybrid Truck and Bus Vouchers	\$26M
Demonstration Projects	\$5-15M
ZEV and Plug-In Hybrid Vehicle Rebates	\$2-5M
Lawn and Garden Equipment Replacement	\$1-2M
Zero-Emission Agricultural ATV Rebates	\$0.8-1.3M
<b>TOTAL</b>	<b>\$35-49M</b>

Expected funding = \$44.3M, pending approval of FY 2009-10 Budget. 15



## Hybrid Truck and Bus Voucher Incentive Program (HVIP)

- Accelerate commercialization of hybrid trucks and buses
  - Criteria, toxic, and greenhouse gas emission reductions
  - Technology advancement and consumer acceptance
- Vouchers for the first ~1,000 hybrid vehicles

16



## Hybrid Truck and Bus Voucher Incentive Program (HVIP) Implementation

- Program website to include eligible vehicles and voucher amounts
- Voucher requested when vehicle is ordered, redeemed at vehicle delivery
- Vehicle owner commits to 100 percent CA operation for five years
- Program administered by third-party

17



## Hybrid Truck and Bus Voucher Incentive Program (HVIP) Vehicle Eligibility Criteria

- ARB-certification of the hybrid vehicle may be required in future funding years
- Eligibility criteria for FY 2009-10:
- ✓ Vehicle is IRS-approved for federal tax credit + additional info required by ARB, or
  - ✓ Hybrid vehicle is ARB-certified

18



## Hybrid Truck and Bus Voucher Incentive Program (HVIP)

### Vehicle Funding Amounts

Vehicle Weight (lbs)	Base Incentive Amount*	ARB Certification
10,001-14,000	\$5,000-15,000	\$5,000
14,001-33,000	\$15,000-\$25,000	\$5,000-\$10,000
>33,000	\$20,000-\$35,000	\$5,000-\$10,000

\* Staff is considering an additional \$5,000/customer for the first hybrid truck or bus purchased.

19



## Hybrid Truck and Bus Voucher Incentive Program (HVIP)

### Next HVIP Work Group Meeting

Date: February 24, 2009	ARB Staff Contact:
Time: 1:30 p.m – 4 p.m.	Mr. Joe Calavita
Call-in Number: 800-369-3104	Tel: (916) 445-4586
Passcode: 61711	E-mail: jcalavit@arb.ca.gov
Location: Cal/EPA Building, Sierra Hearing Room 1001 I Street, Sacramento	



20

## Comments and Discussion



21



## Demonstration Projects

### Draft FY 2009-10 Funding Plan

- Next Generation of Technology
  - Locomotives
  - Marine Vessels
  - Transit and School Buses
  - Off-Road Equipment
  - Agricultural Equipment Projects
- Program administered by air districts or other third party

22



## Demonstration Projects

### Promising Technologies

- Locomotives:
  - Medium Horsepower Locomotive Gen Set
  - Switcher DPF and SCR Retrofit
- Marine Vessels:
  - Tugboat Hybrid Conversion
  - Ferry Hybrid Conversion
  - Sail retrofit

23



## Demonstration Projects

### Promising Technologies

- Transit or School Bus:
  - Fuel Cell Transit Bus
  - Battery-Electric Transit Bus or School Bus
  - School Bus Digital Engine and Hybrid Conversion
- Off-Road Equipment:
  - Fuel Cell Forklift
  - Electric Drive Tractor
  - Zero-Emission Construction Equipment

24



## Demonstration Projects Promising Technologies

- Agricultural Equipment:
  - Engine Thermal Efficiency Improvements
  - Auxiliary Engine Electrification

### ARB Demo Project Contacts

Earl Landberg

Tel: (916) 323-1384

E-mail: elandber@arb.ca.gov

Meri Miles

Tel: (916) 322-6370

E-mail: mmiles@arb.ca.gov

25



## ZEV and Light-Duty Plug-In Hybrid Rebate Program

- Follow model of AFIP Incentives for PZEVs and ZEVs
  - Rebate for purchase of qualifying vehicle
- Ensure near-term CA market for ZEVs and plug-in hybrids
- Provide long-term air quality benefits

26



## ZEV and Light-Duty Plug-In Hybrid Rebate Program

- Program would be administered by a third party
- Staff is considering inclusion of electric medium-duty commercial vehicles
  - Viability for 2009-2010 to be considered in work group meetings

27



## ZEV and Light-Duty Plug-In Hybrid Rebate Program

### Next ZEV and Plug-in Hybrid Vehicle Work Group Meeting

Date: February 18, 2009

Time: 10 a.m. – noon

Call-in Number: 877-939-1569

Passcode: 12553

Location: Cal/EPA Building, CR 610  
1001 I Street, Sacramento

ARB Staff Contact:

Stella Ling-Taylor

Tel: (916) 322-6369

E-mail: slingtay@arb.ca.gov



28



## Lawn & Garden Equipment Replacement Program (LGER)

- Replacement of existing lawn and garden equipment with zero-emission equipment
  - Technology most advanced for residential electric lawn mowers
  - Up to \$300 per piece of equipment
- Focus on areas with worst air quality
- Implemented by local air districts

29



## Lawn & Garden Equipment Replacement Program (LGER)

### Next LGER Work Group Meeting

Date: February 11, 2009

Time: 10 a.m. – noon

Call-in Number: 888-324-4390

Passcode: 58845

Location: Cal/EPA Building, CR 720  
1001 I Street, Sacramento

ARB Staff Contact:

Grace Garcia

Tel: (916) 323-2781

E-mail: ggarcia@arb.ca.gov



30



## Ag Work ATV Rebate Program

- Rebate for purchase of electric work ATVs
  - Up to \$3,000 per vehicle
- Recreational ATVs not eligible for funding
- Implemented by local air districts or other qualified agencies

31



## Ag Work ATV Rebate Program

### Next Ag Work ATV Rebate Program Work Group Meeting

<p>Date: February 17, 2009          Time: 10 a.m. – noon          Call-in Number: 800-593-8979          Passcode: 65434          Location: Cal/EPA Building, CR 720          1001 I Street, Sacramento</p>	<p>ARB Staff Contact:          Meri Miles          Tel: (916) 322-6370          E-mail: <a href="mailto:mmiles@arb.ca.gov">mmiles@arb.ca.gov</a></p>
--	--



32



## Next Steps

February 2009	Project Category Work Group Meetings Continue
March 6, 2009	Proposed AQIP Guidelines Posted (45-Day Public Comment Period)
March 20, 2009	Proposed FY 2009-10 AQIP Funding Plan Posted
April 23-24, 2009	Board Consideration of the AQIP Guidelines and Funding Plan
Summer-Fall, 2009	FY 2009-10 Project Solicitations

33



## For More Information

- AQIP website
  - [www.arb.ca.gov/msprog/aqip/aqip.htm](http://www.arb.ca.gov/msprog/aqip/aqip.htm)
- AQIP list serve
  - [www.arb.ca.gov/listserv/aqip.htm](http://www.arb.ca.gov/listserv/aqip.htm)
- CEC AB 118 website
  - [www.energy.ca.gov/altfuels/index.html](http://www.energy.ca.gov/altfuels/index.html)







## Other AQIP Contacts

**Jack Kitowski** – Chief, On-Road Controls Branch  
 (916) 323-6169, [jkitowski@arb.ca.gov](mailto:jkitowski@arb.ca.gov)

**Lucina Negrete** – Manager, AQIP Section  
 (916) 445-6138, [lnegrete@arb.ca.gov](mailto:lnegrete@arb.ca.gov)

**Andrew Panson** – AB 118 Lead Staff  
 (916) 323-2881, [apanson@arb.ca.gov](mailto:apanson@arb.ca.gov)

**Joe Calavita** – AQIP Lead Staff  
 (916) 445-4586, [jcalavit@arb.ca.gov](mailto:jcalavit@arb.ca.gov)

35

## Comments and Discussion



36