US ERA ARCHIVE DOCUMENT

## National Clean Diesel Campaign: Clean Diesel Programs

FY09/2010 Clean Diesel Program Overview



**National Clean Diesel Campaign** 

### Region 5 Question and Answer calls

- November 6, 10-11 central
- 866-299-3188, 3123533214#

- December 2, 10-11 central
- 866-299-3188, 3123533214#

#### **National Clean Diesel Program**

\$60M for FY2009, Estimated \$60M for FY2010 = \$120M

#### **National**

Estimated \$84 Million (70%) \$42M for FY2009 and Estimated \$42M for FY2010 combined for competitions State
(30%)
\$18 Million FY2009
Estimated \$18 Million FY2010

National Clean Diesel
Funding Assistance Program
\$32M for FY2009 and Estimated \$32M for FY2010 - \$64M

State Clean Diesel Grant Program 2009 \$18M

State Base Matching Bonus

Clean Diesel Emerging Technologies Program \$4M for FY2009 and Estimated \$4M in FY2010 - \$8M

SmartWay Clean Diesel Innovative Finance Program \$6M for FY2009 and Estimated \$6M for FY2010 - \$12M

Budget amounts for FY 2010 are estimated

#### **National Clean Diesel Campaign**

\$60M for FY2009, Estimated \$60M for FY2010

#### **National Component**

\$84 Million (70%)



National Clean Diesel Funding Assistance Program \$32M for 2009, Estimated \$32M for 2010 = ~ \$64M

Competitive grant process. Single request for proposals. Apply to EPA Regions.

**SmartWay Clean Diesel Finance Program** 

Clean Diesel Emerging Technologies Program

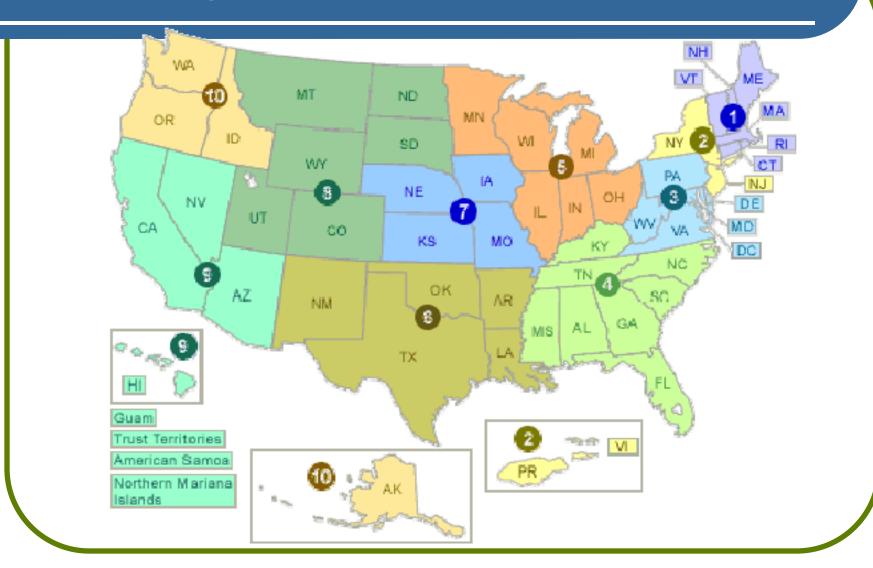
# National Clean Diesel Funding Assistance Program

- Important dates:
  - October 6, 2009 RFP OPENS
  - December 8, 2009 RFP CLOSES PROPOSALS DUE
  - February 2010 NOTIFICATION OF SELECTION
  - March 2010 ANTICIPATED AWARD
- Options to submit their proposals:
  - a) Hard copy by express delivery service or hand delivery to the specified EPA contact, or b) electronically through email to the specified EPA contact (mcdi@epa.gov).
  - Proposals will NOT be accepted via fax or standard 1st class mail delivery by U. S. Postal Service.

## National Clean Diesel Funding Assistance Program

- Region 5: Only non-tribal proposals requesting EPA funding between \$250,000 and \$1,500,000 will be accepted. It is anticipated that 10-20 Region 5 assistance agreements will be made from this announcement.
- Tribes and Intertribal consortia apply to tribal contact and not to Regions (see RFP for details)
- There is a template for the narrative proposal
- The project must take place in the EPA Region in which the proposal is submitted

## EPA Regions



## Tribal Proposals

 Tribes and Intertribal consortia apply to tribal contact and not to Regions (see RFP for details)

### Tribal Proposals:

 Only proposals from eligible tribal agencies or intertribal consortia requesting EPA funding of \$30,000 or more will be considered. It is anticipated that approximately 5-10 tribal assistance agreements will be made from this announcement.

## National Clean Diesel Funding Assistance Program: Eligible Entities

- Regional, state, local, tribal or port agency with jurisdiction over transportation or air quality; and
- Nonprofit organization or institution which
  - Represents or provides pollution reduction or educational services to persons or organizations that operate diesel fleets; or
  - Has, as its principal purpose, the promotion of transportation or air quality

## National Clean Diesel Funding Assistance Program: Public Fleets

At least 50% of funding is dedicated for the benefit of public fleets

 Will include private fleets contracted or leased for public purpose, such as private school buses or refuse haulers



 Only eligible entities can apply directly for funds (i.e., school district applies on behalf of private school bus contractor)

Per DERA, this is a requirement for the National program as a whole, not a projectspecific requirement. This requirement does not apply to the State program.

- Cannot fund the cost of emissions reductions mandated under Federal, State or Local law
  - Cannot fund after effective date of requirement
  - Can fund early compliance
  - Emission reductions and cost-effectiveness should be calculated only for the period up to the effective date of the requirement
- Grants are not for emissions testing
- Grants are not for fueling infrastructure, such as biodiesel manufacturing facilities or CNG fueling stations

- Technologies and engines must be verified and/or certified by USEPA or CARB
- http://www.epa.gov/cleandiesel/
- Verified Retrofit Technologies include:
  - Exhaust Controls
  - Engine Upgrades
  - Cleaner Fuels
  - Idling Reduction Technologies

#### Verified Retrofit Technologies:

- A "retrofit" technology is defined broadly to include any technology, device, fuel or system that when applied to an existing diesel engine achieves emission reductions beyond what is required by EPA regulations at the time of the engine's certification.
- EPA verified technologies are available at http://www.epa.gov/otaq/retrofit/verif-list.htm and http://www.epa.gov/otaq/smartway/transport/whatsmartway/verified-technologies.htm.
- A list of CARB verified technologies is available at http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm.

#### **Exhaust Controls**

 Exhaust Controls include pollution control devices installed in the exhaust system (such as diesel oxidation catalysts and diesel particulate matter filters), or systems that include crankcase emission control.

#### **Engine Upgrades**

- An engine upgrade is defined as an engine that is rebuilt or remanufactured to meet higher federal emission standards.
- Some engines are able to be upgraded to reduce their emissions by applying manufacturer recommended upgrades (or kits) to certified or verified configurations.
- Note: this funding cannot be applied to the entire cost of an engine rebuild, but only the emissions-reducing upgrade kit and associated labor costs for installation.

#### Cleaner fuels

- Cleaner fuels include, but are not limited to, ultra-low sulfur diesel fuel (for non-road vehicles, engines and equipment prior to EPA's mandate), biodiesel, diesel emulsions or additives verified by EPA or CARB, compressed natural gas, propane and other certified alternative fuels.
- For new or expanded use of a cleaner fuel, this funding can cover the cost differential between the cleaner fuel and conventional diesel fuel.
- Note: This funding cannot be used for fueling infrastructure, such as that used for the production and/or distribution of fuel such as biodiesel, or compressed natural gas fueling stations.

#### Certified Engine Repowers

- Repower refers to the removal of an existing engine and its replacement with a newer, cleaner engine that is certified to a more stringent set of engine emissions standards.
- In order for a repower to be eligible, the repowered vehicle, engine or equipment must continue to perform the same function as before the repower.
- EPA is particularly interested in projects that combine engine repower with verified technologies which will further reduce emissions.

#### Certified Vehicle and Equipment Replacements

- Non-road and highway diesel vehicles and equipment can be replaced under this program with newer, cleaner vehicles and equipment that operate on diesel or alternative fuels and meet a more stringent set of engine emissions standards.
- Replacement projects can include the replacement of diesel vehicles/equipment with newer, cleaner diesel or hybrid or alternative fuel vehicles/equipment.
- The replacement vehicle/equipment must be of the same type and similar gross vehicle weight rating or horsepower as the vehicle/equipment being replaced
- The replacement vehicle/equipment must perform the same function as the vehicle/equipment that is being replaced.

## School Bus Replacements

- 25% funding for buses that meet model year 2007 emissions requirements
  - Must be filter equipped for diesel
  - Must be catalyst equipped for CNG
- 50% funding for buses that meet model year 2010 emission requirements
  - As specified by the Family Emission Limit on the EPA engine emission control label

For Certified Engine Repowers and Certified Vehicle and Equipment Replacements:

- The vehicle/equipment being replaced will be scrapped or rendered permanently disabled or returned to the original engine manufacturer for remanufacturing to a certified cleaner emission standard (to model year 2007 standards or newer for onroad engines).
- Emission reductions that would have occurred through normal attrition are considered to be the result of normal fleet turnover and are not eligible for funding under this program.
- The purchase of new vehicles or equipment to expand a fleet is not covered by this program.

#### Verified Idle Reduction Technologies

- (1) auxiliary power units and generator sets;
- (2) battery air conditioning systems;
- (3) thermal storage systems;
- (4) electrified parking spaces (truck stop electrification);
- (5) fuel operated heaters;
- (6) shore connection systems and alternative maritime power;
- (7) shore connection systems for locomotives;
- (8) automatic shutdown/start-up system (for locomotives)

Note: These technologies may be verified for specific engine/fleet types <a href="http://www.epa.gov/cleandiesel">http://www.epa.gov/cleandiesel</a> select Verified Idle Reduction Technologies

#### Verified Aerodynamic Technologies

- Trailer aerodynamic devices include gap fairings that reduce the gap between the tractor and the trailer to reduce turbulence, trailer side skirts that minimize wind under the trailer, and trailer rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- EPA is particularly interested in projects that combine aerodynamic technologies with verified retrofit technologies which will further reduce emissions.
- http://www.epa.gov/cleandiesel select Verified Idle Reduction Technologies

Verified Low Rolling Resistant Tires (for class 8 trucks)

- The options offered include both dual tires and single wide tires (single wide tires replace the double tire on each end of a drive or trailer axle, in effect turning an "18" wheeler into a "10" wheeler).
- EPA is particularly interested in projects that combine these tires with verified retrofit technologies which will further reduce emissions.
- http://www.epa.gov/cleandiesel select Verified Idle Reduction Technologies

## National Clean Diesel Funding Assistance Program: % of \$ for Technologies/Projects

- EPA's Clean Diesel funding will cover up to:
  - 100% for verified exhaust controls
  - 100% for certified engine upgrades
  - 100% for incremental cost of cleaner fuels
  - 75% for certified engine repowers
  - 25% for all certified replacements that meet model year 2007 emission standards
  - 50% for school buses that meet model year 2010 emissions standards
  - 100% for verified idle reduction technologies
  - 100% for verified aerodynamic technologies and low rolling resistance tires

## National Clean Diesel Funding Assistance Program: Eligible Fleets and Equipment

#### Including but not limited to:

- Buses
- Medium or heavy duty trucks
- Marine engines
- Locomotives





- Non-road engine, stationary engine or vehicle used for:
  - Construction
  - Handling of cargo (including at a port or airport)
  - Agriculture
  - Mining
  - Energy production (genset)

## National Clean Diesel Funding Assistance Program: Priority Projects

Project proposals that align with these priorities will rank higher in the evaluation process:

- Maximize public health benefits
- Are the most cost-effective
- Are in areas with high population, air quality issues, and air toxic concerns
- Are in areas that receive a disproportionate quantity of air pollution (i.e. truck stops, ports)
- Maximize the useful life of the engine
- Conserve diesel fuel and utilize ULSD (early introduction of ULSD for non-road projects)

#### National Clean Diesel Campaign

\$60M for FY2009, Estimated \$60M for FY2010

#### **National Component**

\$84 Million (70%)



National Clean Diesel Funding Assistance Program

Competitive grant program to establish innovative finance mechanisms

SmartWay Clean Diesel Finance Program ~\$12 M

**Clean Diesel Emerging Technologies Program** 

## SmartWay Clean Diesel Finance Program: Overview

- Finance Program provides grant funds to establish national, regional, state, Tribal or local financial programs
  - Programs support the deployment of verified energy efficient technologies and emission control technologies
  - http://www.epa.gov/otaq/diesel/prgfinance.htm
- Items similar to National Clean Diesel Funding Assistance Program:
  - Same eligible entities
  - Same eligible vehicles & equipment

## SmartWay Clean Diesel Finance Program: Examples

- Examples of Finance Projects:
  - Revolving Loans: Low-cost loans made for clean diesel retrofits or replacements
  - Loans leveraged with public or private funds (e.g., bonds)
  - Loan guarantees

## SmartWay Clean Diesel Finance Program: FY2009/2010 Funding Timeline

Activity	Date
Information and preparation of applications	August – September
Application submissions	October 9 – December 8, 2009
EPA evaluations	December – February 2010
Project review and award	February – April 2010
Project implementation	Spring 2010

#### National Clean Diesel Campaign

\$60M for FY2009, Estimated \$60M for FY2010

#### **National Component**

\$ 84 Million (70%)

National Clean Diesel Funding Assistance Program

Competitive grant program to deploy emerging technologies not yet verified

**SmartWay Clean Diesel Finance Program** 

## Clean Diesel Emerging Technologies Program: Overview

- Only eligible entities as defined under the National Program may apply
- Use of Funds
  - Type of technology
    - Technologies used must be on EPA's Emerging Technologies List by the close of the Request for Proposals
    - Verified Technologies are ineligible
  - Other uses of funding
    - Testing such as additional data logging/monitoring of the devices or measuring emissions with a portable emission measurement system is acceptable
  - Program does not cover research and development costs
  - Program does not cover cost of verifying technology

## Clean Diesel Emerging Technologies Grant Program: FY2009/2010 Funding Timeline

Activity	Date
Information and preparation of applications	August - September
Application submissions	October 6 – December 8, 2009
EPA evaluations	December - January 2010
Project review and award	January - March 2010
Project implementation	Spring 2010

#### **National Clean Diesel Campaign**

\$60M for FY2009, Estimated \$60M for FY2010

#### **National Component**

\$84 Million (70%)

State Component FY09 Funding \$18 Million

(30%)





State Clean Diesel Grant Program \$ 18M

**State Base** 

**Matching Bonus** 

National Clean Diesel Funding Assistance Program

**SmartWay Clean Diesel Finance Program** 

**Clean Diesel Emerging Technologies Program** 

## State Clean Diesel Grant Program: Overview

- "States shall use funds to develop and implement grant and low-cost revolving loan programs as appropriate to meet State needs and goals relating to the reduction of diesel emissions"
- Eligible for FY 09 State program grants:
  - 50 States
  - District of Columbia

## State Program Funding

- \$18M for State Program
  - If all 50 states and DC apply for funds
    - \$235K Base Funds
    - \$118K Bonus Funds (State provides \$235K match)
- Otherwise, the DERA (EPAct 2005) allocation population formula will apply
- Total per State without match: \$235K
- Total per State, including State match, would be \$588K

### Need more info?

- NCDC Helpline:
  - 1-877-623-2322 (1-877-NCDC-FACTS)

or

- cleandiesel@epa.gov
- Engineering/technical support
- Diesel Emissions Quantifer questions
- General clean diesel questions
- Any questions regarding the RFPs must be sent in writing to <u>cleandiesel@epa.gov</u>
- Question and Answer Document/Tools and Resources
  - http://www.epa.gov/otaq/diesel/prgnational.htm

## Clean Diesel Programs: Wrap-Up

• Questions?

Need more info? www.epa.gov/cleandiesel