

National Clean Diesel Campaign: Clean Diesel Programs

FY09/2010 Clean Diesel Program Overview



National Clean Diesel Campaign

Why Clean Diesel?

- Reducing diesel emissions is one of our country's most important air quality challenges
- Diesel engines are the workhorses of the nation; millions of diesel engines already in use continue to emit large amounts of nitrogen oxides, particulate matter and air toxics
- These emissions are linked to premature deaths, asthma attacks, lost work days, and other health impacts every year

The Good News

- Cost-effective solutions are available now that bring immediate environmental and public health benefits
- Funding is available too
- How? The National Clean Diesel Campaign – Clean Diesel Programs



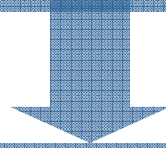
www.epa.gov/cleandiesel

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



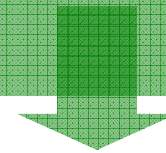
National Clean Diesel
Funding Assistance Program
\$32M for FY2009 and Estimated \$32M for FY2010 - \$64M

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

State

(30%)
\$18 Million FY2009
Estimated \$18 Million FY2010



State Clean Diesel Grant Program 2009 \$18M

State Base

Matching Bonus

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.**

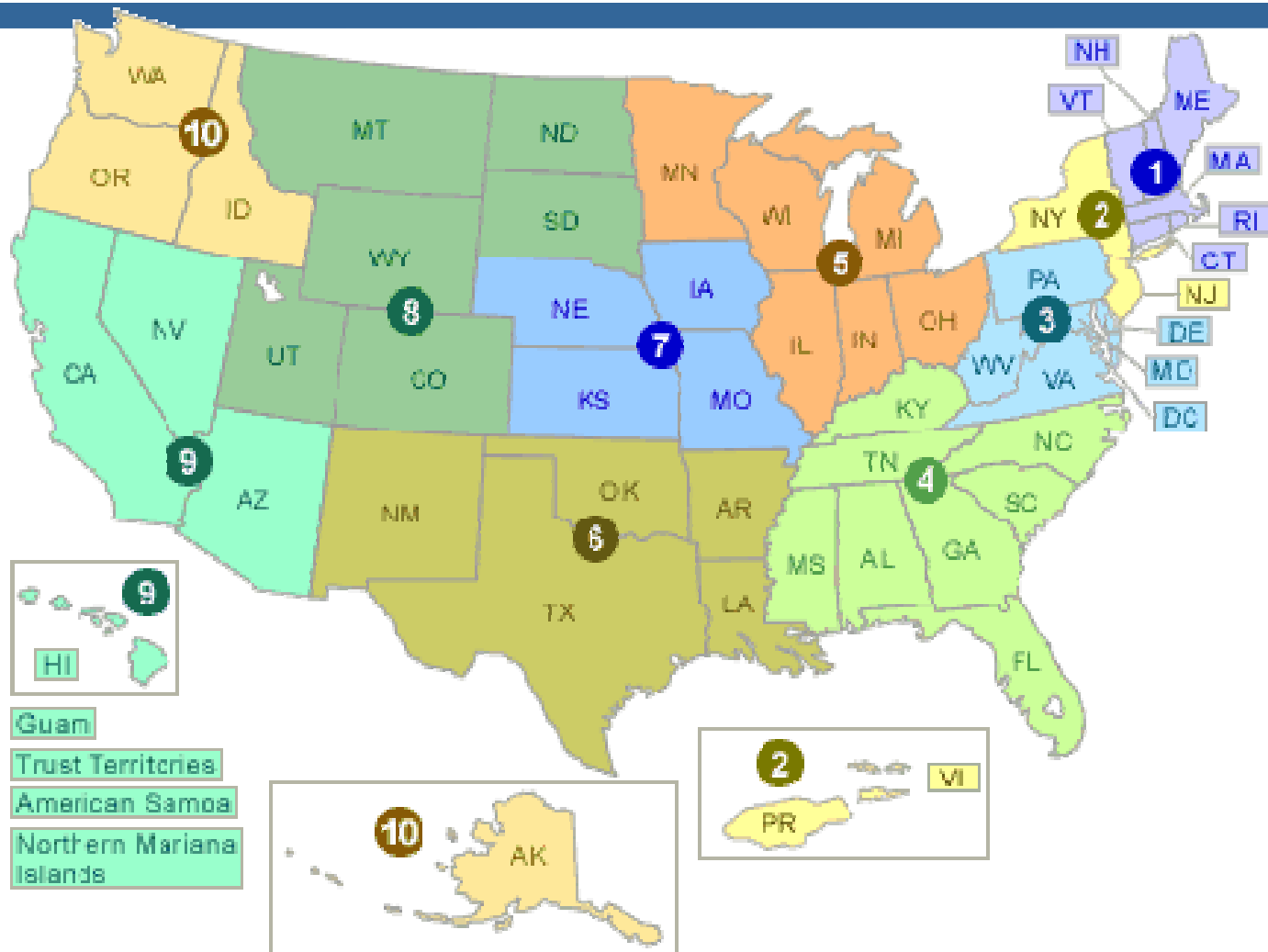
SmartWay Clean Diesel Finance Program

Clean Diesel Emerging Technologies Program

National Clean Diesel Funding Assistance Program

- One national Request for Proposals
 - Published October 6, 2009, closing December 8, 2009
 - ~ \$64M for FY 09 and FY 10 combined
 - Two-year project periods
 - RFP = Submit only Forms 424, 424A, & Narrative Proposal
- The project must take place in the EPA Region in which the proposal is submitted
- Tribes and Intertribal consortia apply to tribal contact and not to Regions (see RFP for details)
- There will be a required template for the narrative proposal
- See Request for Proposals for how to apply

EPA Regions



Regional Collaboratives

- Northeast Diesel Collaborative (Regions 1, 2)
 - <http://www.northeastdiesel.org/>
- Mid-Atlantic Diesel Collaborative (Region 3)
 - <http://www.dieselmidatlantic.org/diesel/index.htm>
- Southeast Diesel Collaborative (Region 4)
 - <http://www.southeastdiesel.org/>
- Midwest Clean Diesel Initiative (Region 5)
 - <http://www.epa.gov/midwestcleandiesel/>
- Blue Skyways Collaborative (Regions 6, 7 plus Minnesota)
 - <http://www.blueskyways.org/>
- Rocky Mountain Clean Diesel Collaborative (Region 8)
 - <http://www.epa.gov/region8/air/rmcdc.html>
- West Coast Collaborative (Regions 9, 10)
 - www.westcoastcollaborative.org/

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 project-specific requirement. This requirement does not apply to the State program.

National Clean Diesel Funding Assistance Program: Use of Funds

- 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

National Clean Diesel Funding Assistance Program: Use of Funds

- 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

National Clean Diesel Funding Assistance Program: Use of Funds

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/what-smartway/verified-technologies.htm>.
- A list of CARB verified technologies is available at <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>.

National Clean Diesel Funding Assistance Program: Use of Funds

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.

National Clean Diesel Funding Assistance Program: Use of Funds

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.

National Clean Diesel Funding Assistance Program: Use of funds

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.
- Funding available under this program can be used to 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.

National Clean Diesel Funding Assistance Program: Use of funds

- Certified Engine Repowers
 - Replacing older engine with a newer, cleaner certified engine in the same chassis
- Certified Vehicle and Equipment Replacement
 - On-road (other than school bus)
 - Non-road
 - School Bus

National Clean Diesel Funding Assistance Program: Use of Funds

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.
- Repower includes, but is not limited to, diesel engine replacement with an engine certified for use with a cleaner fuel and/or the replacement of a non-road engine with a highway engine.
- 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.

National Clean Diesel Funding Assistance Program: Use of Funds

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

National Clean Diesel Funding Assistance Program: Use of Funds

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.

National Clean Diesel Funding Assistance Program: Use of Funds

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
<http://www.epa.gov/cleandiesel>
select *Verified Idle Reduction Technologies*

National Clean Diesel Funding Assistance Program: Use of Funds

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*

National Clean Diesel Funding Assistance Program: Use of Funds

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 Funding Assistance 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%)



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: Use of Funds

- Finance Program grants are used to establish loans or other financing mechanisms, which:
 - Have better than market terms (e.g., lower interest rate, longer term, etc).
 - Assist fleet owners in purchasing verified/certified engines, vehicles, technologies
 - Maximize total project funds available and be sustainable to maintain the program
 - Are cost-effective (\$/ton reduction)

SmartWay Clean Diesel Finance Program: Priority Projects

- EPA is particularly interested in projects that:
 - Offer diesel vehicle owners financing at better than current market rates or terms for the purchase of cleaner vehicles or equipment installed with diesel exhaust after treatment
 - Combine technologies with verified retrofit technologies, e.g., combining an APU with a diesel particulate filter

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

SmartWay Clean Diesel Finance Program

Clean Diesel Emerging Technologies Program ~\$8 M

**Competitive grant
program to deploy
emerging
technologies not
yet verified**

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 Program: Manufacturers

- Eligible entities must be partnered with a manufacturer to apply for funding.
- Eligible manufacturers must be on EPA's emerging technologies list prior to closing date of Request for Proposals
 - To get on this list, manufacturers must work with EPA to apply for verification and develop a test plan for evaluating their technology

www.epa.gov/cleandiesel
select *Emerging Technologies*

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%)



National Clean Diesel Funding Assistance Program

SmartWay Clean Diesel Finance Program

Clean Diesel Emerging Technologies Program

State Component

FY09 Funding \$18 Million
(30%)



State Clean Diesel Grant Program \$ 18M

State Base

Matching Bonus

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

- State Program receives 30% of DERA funds
 - 20% - Base for participating states (\$12M)
 - 10% - Bonus for matching states (\$6M)
- Match not required
- If State matches base allocation dollar for dollar, State receives an additional 50% of base allocation
- Any funding not utilized reverts to national program

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 (EPA Act 2005) allocation population formula will apply
- Total per State without match: \$235K
- Total per State, including State match, would be \$588K

FY 2009 State Program Funding

- Match EPA Base funds dollar for dollar:
 - State or private sources, including State SEPs
 - Monetary or in-kind contributions
 - Federal funds cannot be used as match (CMAQ, DOE, Federal SEPs, other federal grant funds)
- FY 2009 funding will be provided as an Amendment or Supplement to the existing work plans
- States should work with EPA on revising work plan and budget
- OTAQ will provide more instruction regarding FY2010 once budget is finalized

State Clean Diesel Grant Program: Use of Funds

- Funding may not go to Federal, local and/or state mandated retrofits under State program
- States can use up to 15% for program administration (travel, personnel, etc.)

DERA State Program FY 2009 Schedule

Activity	Date
OTAQ sends States FY2009 letter and instructions, Notice of Intent to Continue and Match/Not match and proposed source of match	October 1
States send OTAQ Notice of Intent to Continue via cleandiesel@epa.gov . OTAQ shares Notice with regions; regions check source of match, etc.	October 15
Regions send out final allocations to States	October 27
States submit revised statement of work and other appropriate forms for amendment/supplement (by)	December 11
Regions amend grants (by)	January 29

Need more info?

- NCDC Helpline:
 - 1-877-623-2322 (1-877-NCDC-FACTS)
- or
 - cleandiesel@epa.gov
 - Engineering/technical support
 - Diesel Emissions Quantifier questions
 - General clean diesel questions
- Any questions regarding the RFPs must be sent in writing to cleandiesel@epa.gov

Answers typically provided within one business day

Clean Diesel Programs: Wrap-Up

- Competitive Programs
 - Are you an eligible entity?
 - Which program applies to you?
 - Could you partner with an eligible entity?
 - When and how to apply?
- State Program
 - Work with the EPA Regional offices to amend/supplement existing work plans

Need more info? www.epa.gov/cleandiesel