

Reducing Diesel Emissions at Airports – EPA Programs and Resources

Grace Cheng

Air Division

Environmental Protection Agency, Region 9

January 26, 2010



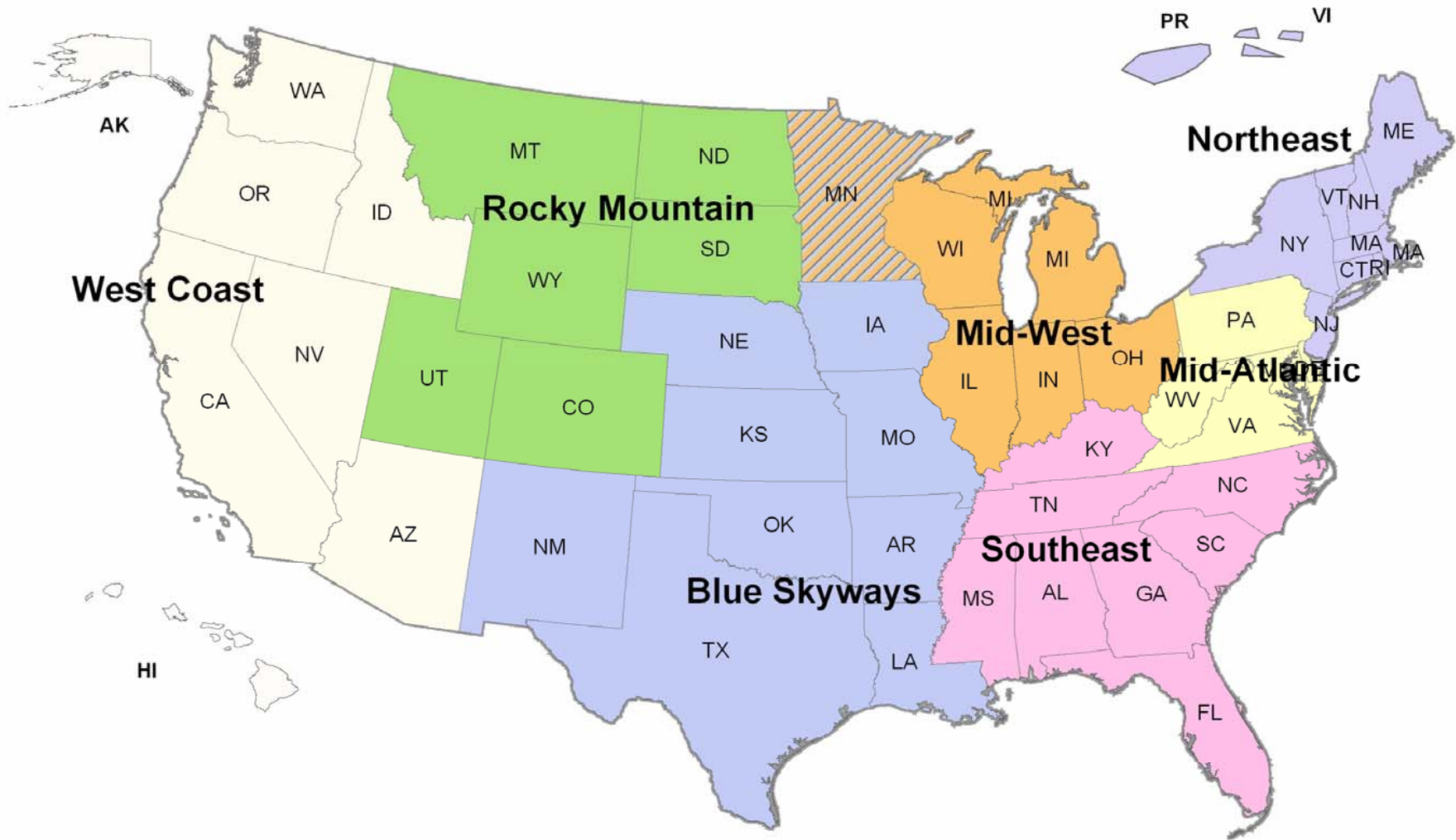
WEST COAST COLLABORATIVE
A public-private partnership to reduce diesel emissions

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 (e.g. ground support equipment, transit buses)
- These emissions are linked to premature deaths, asthma attacks, lost work days, and other health impacts every year
- Clean diesel projects offer immediate public health and air quality benefits, especially important in areas of poor air quality such as nonattainment areas



Regional Clean Diesel Collaboratives



 **WEST COAST COLLABORATIVE**
A public-private partnership to reduce diesel emissions

Diesel Emission Reductions Act (DERA)

- Authorization: Energy Policy Act of 2005
- \$200 Million per year for five years authorized; \$49.2M and \$120M appropriated in FY08 and FY09/2010, respectively
- FY09/2010 funding cycle is now closed, awards will be announced in the Spring
- For information about the next funding cycle, please visit www.epa.gov/cleandiesel OR www.westcoastcollaborative.org
- Allows for “implementation” rather than “demonstration”

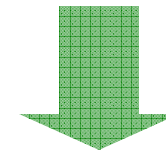
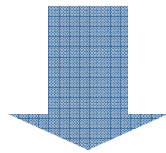


National Clean Diesel Program

\$120 Million for 2009 and 2010

National
\$84 Million (70%)

State
\$36 Million (30%)



**National Clean Diesel
Funding Assistance Program \$64 M**

State Clean Diesel Grant Program \$1.7 M/State

State Base

Matching Bonus

Clean Diesel Emerging Technologies Program

SmartWay Clean Diesel Finance Program



WEST COAST COLLABORATIVE
A public-private partnership to reduce diesel emissions

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 principle purpose, the promotion of transportation or air quality



WEST COAST COLLABORATIVE
A public-private partnership to reduce diesel emissions

National Clean Diesel Funding Assistance Program: Public Fleets

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

- Includes private fleets contracted or leased for public purpose, such as ground transportation vehicles
- Only eligible entities can apply directly for funds (i.e., city/county government and/or nonprofit can apply on behalf of airport)



WEST COAST COLLABORATIVE
A public-private partnership to reduce diesel emissions

National Clean Diesel Funding Assistance Program: Use of Funds

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



Funding Coverage

- 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 emissions standards
 - School Bus Replacement
 - Meet 2007 emissions limits, EPA will fund 25% of the cost
 - Meet 2010 emissions limits, EPA will fund 50% of the cost
 - 100% for verified idle reduction technologies
 - 100% for verified aerodynamic technologies and low rolling resistance tires



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.



WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

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: Eligible Fleets and Equipment

- **Buses**
- **Medium or heavy duty trucks**
- **Construction**
- **Handling of cargo (including at port or airport)**
- **Energy production**



WEST COAST COLLABORATIVE
A public-private partnership to reduce diesel emissions

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 density, poor air quality issues, and air toxic concerns
- Are in areas that receive a disproportionate quantity of air pollution from diesel fleets (i.e. truck stops, ports)
- Maximize the useful life of the engine
- Conserve diesel fuel and utilize ULSD (early introduction of ULSD for nonroad projects)



WEST COAST COLLABORATIVE
A public-private partnership to reduce diesel emissions

Regional Priorities

- Achieves greenhouse gas reductions and diesel criteria pollutant reductions (particulate matter and/or nitrogen oxide reductions)
- Reduces emissions along interstate and international goods movement corridors
- Works with communities and/or tribes in project development and implementation



WEST COAST COLLABORATIVE
A public-private partnership to reduce diesel emissions

WCC Project: California Airports Partnership

- Partners: EPA, CalStart, LAX (LA), SFO (SF), SAN (San Diego), OAK (Oakland)
- EPA Funding: \$895,827, Leveraged Funding: \$925,325
- Diesel retrofits on scrubbers, sweepers, emergency vehicles, operations equipment, and shuttle buses
- Replace airfield shuttles, pickups, and regional shuttles
- Replace Ultra Low Sulfur Diesel with B20 Biodiesel



For More Information

- West Coast Collaborative
www.westcoastcollaborative.org
- EPA's National Clean Diesel Campaign
www.epa.gov/cleandiesel

Grace Cheng

Public Fleets Sector Lead, WCC

415-972-3983

Cheng.grace@epa.gov

