

National Clean Diesel Campaign

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Midwest Clean Diesel Initiative

June 30, 2010



National Clean Diesel Campaign

In 2000, 2001...

- Handful of staffers
- ~\$200,000
- Couple of “early adopter” fleets
 - WMATA
 - Everett School District in WA State
 - FedEx in Texas
- Several States had programs and/or funding
 - Texas, California



Federal Funding Begins in 2003 with Clean School Bus USA

- Acting Administrator Marianne Horinko launches Clean School Bus USA program
- 2003 first appropriation of \$5M from Congress for CSBUSA
 - 17 grants awarded
 - 500,000 children riding cleaner buses
- 2003-2007
 - \$31.5M total funding
 - ~160 grants total
 - ~3 million children riding cleaner buses
 - ~40,000 school buses involved

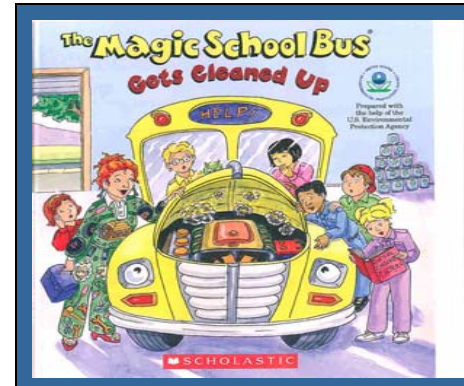


CSBUSA launch in
Dayton, OH, 2003

Clean School Bus Gets Creative

Idling Reduction Program

~100,000 bus drivers trained



Magic School Bus Gets Cleaned Up released in 2007



National Clean Diesel Campaign Launched

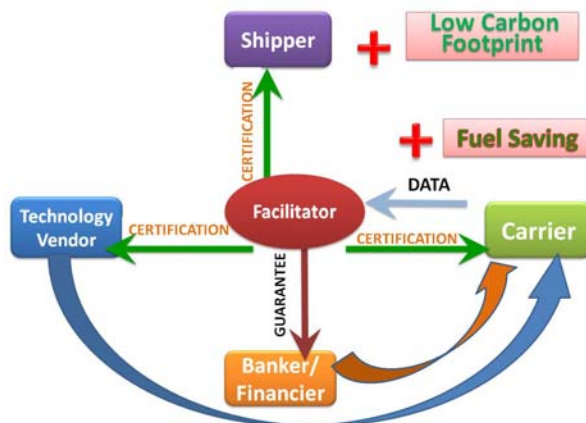
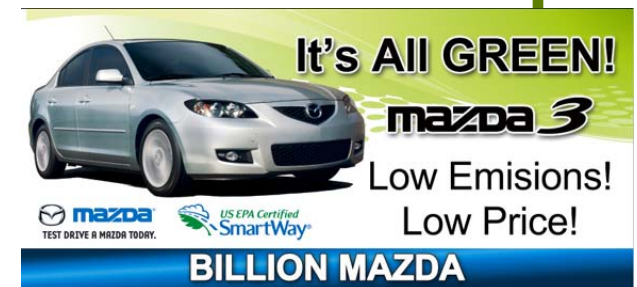
- Goal: *Reduce Emissions from the Legacy Fleet of over 11 Million Diesel Engines*
- Focused on Five Sectors:
 - School Buses
 - Ports
 - Construction
 - Agriculture
 - Freight (SmartWay Transport Partnership)



Construction Retrofit
project in California

SmartWay Transport Partnership Developed

- Goal: Promote cleaner, more efficient transportation options
 - Freight Partnership – launched in 2004
 - Light Duty – launched in 2005
 - Global Supply Chain
 - International Partnerships, sister programs

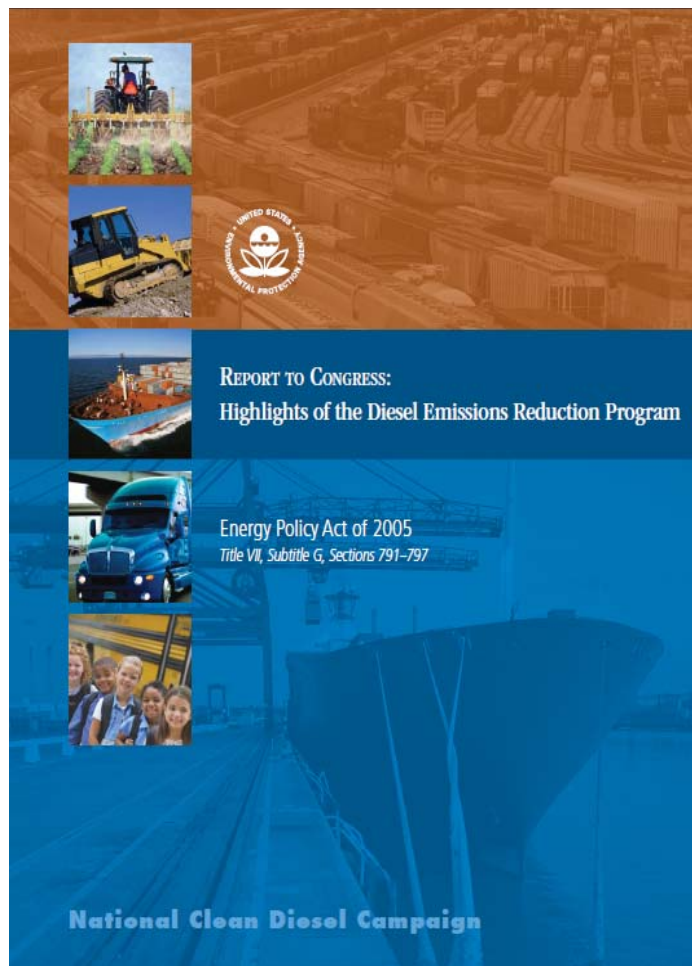


Federal Funding Continues for NCDC Projects

- 2004 First Funding for NCDC
 - \$1.1 million
 - 10 grants
- 2006-2007 Appropriations
 - \$7.2 M (\$5M, \$2.2M)
 - ~ 50 grants
- Clean diesel activity (2000-2005)
 - Emission reductions: ~20,000 tons PM ~100,000 tons NOx
 - Approx. \$5 billion in health benefits over the life of these programs



DERA Legislation Brings New Funding Source to NCDC



- Authorized by the Energy Policy Act of 2005 Sub-Title G, Sections 791-797
- \$200M per year for five years; \$49.2M appropriated for FY08
- Allows for “implementation” rather than “demonstration”
- 119 grants affecting 14,000 vehicles and reducing over life of program:
 - 46,000 tons NO_x
 - 2,200 tons PM
 - 3 M gallons diesel fuel saved

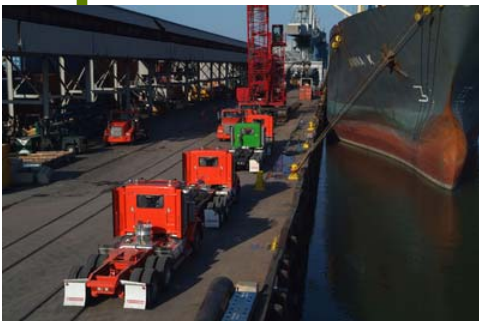
Emerging Technologies Program

- DERA grant program for innovative, non-verified technologies
- Eligible entities apply to use technologies listed on Emerging Technologies List
(www.epa.gov/cleandiesel)
- 25 grants and ~ \$30 million since FY 2008
- 14 emerging technologies listed



SmartWay Finance Program

- Goal: Maximize deployment of fuel saving and emission reduction technologies in the market
 - 2006: SWT partnered with financing programs (SBA, Arkansas, Minnesota)
 - More environmental controls = Better financing rates or terms
- 2008: DERA funding supports development of financing programs to reduce fuel costs and emissions
- SmartWay Finance funding supports wide range of projects
 - Over-the-road and regional truck fleet upgrade
 - APU rebates for independent owner-operators
 - CNG retrofits of school buses
 - Retrofit and repower of port, construction, and agricultural equipment



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START

Available Technology:

- Idle Reduction
- Aerodynamics
- Wheels / Tires
- SmartWay Certified Tractors
- SmartWay Certified Trailers

Navigate to:

- SmartWay Clean Diesel Finance Program **NEW**
- Home
- Introduction
- About Us
- Lenders
- Vendors
- Contact Us

This World Wide Web site is provided as a public service by the U.S. Environmental Protection Agency (EPA), SmartWay Transport Partnership. The purpose of this site is to efficiently and conveniently disseminate information on financing that is available for purchasing cleaner trucks and trailers, and emissions reducing and fuel saving technologies (such as auxiliary power units). All loan information contained in this site represents private company loans. These are not Federal government loans. If you obtain a loan from any of the financial entities here you are subject to their contractual terms and conditions. The EPA does not endorse the products or services of commercial companies, nor does the EPA endorse the lenders participating through this website. Any reference to a specific commercial product or service by trade name, trademark, manufacturer, company, or otherwise does not constitute or imply the endorsement or recommendation of the EPA.

EPA's Regional Diesel Collaboratives

- Networking
- Project Development
- Emissions Reductions
- Community-Based Action



MCDI

- Model of collaboration
- State collaborative network
- Sets the pace for other Regions

Development of Tools and Resources

- Technology Verification Program
- Diesel Emissions Quantifier (web-based calculator)
- Cost-Benefits Information, SIP Guidance
- Sector-based assistance
- Communications Tools



Cargo handler at Charleston port

Diesel SEPs: Supplemental Environmental Projects

- State and Federal SEPs contribute significant funding nationwide to diesel projects ~ \$150M+
 - State SEPs continued
 - Federal SEPs disallowed due to Miscellaneous Receipts Act for several years
 - Federal clean school bus SEPs disallowed in 2004
 - Federal general diesel SEPs disallowed in 2006
- Fixed by legislation August 2008 (SB 2146); Federal diesel (both general and school bus) SEPs now permitted once again

Clean Buses
for Kids



Recovery Act Funding



Administrator Jackson announces first ARRA DERA grants in Cincinnati, OH for school buses.

- \$300 M for DERA to support job creation, stimulate economy and lower diesel emissions
- > 600 applications for \$ 2 billion in requests with over \$2 billion in matching dollars
- 25% of funds spent; some grants already closing
- Hundreds of jobs so far created/retained

Recovery Act Projects: American Lung Association of Upper Midwest



Owner reports increase of fuel mileage of 2.22 mpg and 41% reduction of idling time

15 trucks in Alabama owned by Robbie D. Wood, Inc. were retrofitted with battery operated air conditioners

Recovery Act Project: Railroad Research Foundation



- Repowering locomotives for the City of Baton Rouge, LA.
- Locomotives will be used as switchers in yard.
- Tier 2 turbo-charged 8-cylinder engine rated at 2,000 HP, which meets EPA's emission standards.

Recovery Act Project: Mississippi River Corridor – Ingram Barge

- 13 Kits on 6 Vessels
- Emerging Technology: ESW's DOC (below) and Crankcase Ventilation System



- PEMS emissions testing by Emisstar

FY 09/10 DERA Funding - \$120M

- EPA awarding grants this Spring/Summer
- Announcing grants July through the Fall:
 - 71 Regional competitive grant awards
 - 4 SmartWay Finance grants
 - 4 Tribal grants (first time through DERA)
 - 5 Emerging Technology grants
 - 51 State Grants continued from FY 08 (plus D.C.)

FY 2011

- Anticipating ~\$60M again
- National competitive program
 - One national RFP
 - Target date for posting = Nov. 1st
 - Revising it now with Regional staff input
- State program continuation (amendments)
 - ~ Jan-May 2011 timeframe

Future Trends: Climate Change – Black Carbon

- Black Carbon (BC)
 - Light absorbing component of soot (PM)
 - Results from incomplete combustion of diesel fuel, wood, crop waste, biomass, etc.



Why is Addressing Black Carbon Important?

- BC contributes to climate change by absorbing sunlight, warming the atmosphere and darkening the surface of snow & ice, speeding melting.
- May be responsible for 30-50% of observed warming in the Arctic (BC emissions have a disproportionate impact on melting polar ice caps).
- BC warming effects are short-lived (unlike long-lived GHGs like carbon dioxide) so reductions of BC help mitigate warming in the near term.
- A majority of the technologies and strategies developed and promoted within the NCDC help to reduce BC emissions. So, in a sense, we've been pursuing these reductions all along.

Future Trends: Goods Movement



Hydraulic hybrid yard hostler

- Supply chain management
- New technologies
 - Yard Hostler and other hydraulic hybrid applications
 - Marine and off-road emissions control technologies
- Community-based/EJ initiatives

Clean Diesel 10 Conference

- October 19-20, 2010
- Washington, D.C.
- www.epa.gov/cleandiesel
for more info and to register

**Don't miss this ten year
anniversary celebration and
conference!**



*A Decade of Action –
Working Together for Cleaner Air*