NATIONAL CLEAN DIESEL CAMPAIGN & FUNDING DERA, VW, AND SMARTWAY

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Healthy Ports, Vibrant Ports Workshop

October 24, 2017

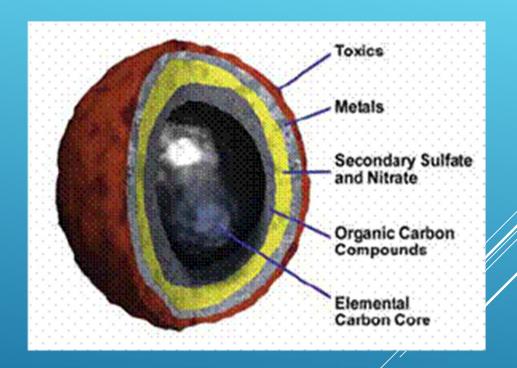
DIESEL AND HEALTH

Pollutants:

- Particulate Matter
- Ozone Precursors
- Carbon Monoxide

Health Impacts Include:

- Heart Disease
- Lung Disease (e.g. Asthma)
- Probable Carcinogen



DIESEL EMISSIONS REDUCTION ACT (DERA)

- Included in the Energy Policy Act of 2005
- Funds appropriated every year since 2008
- Reauthorized in 2011
- Authorizes up to \$100 million per year to replace and upgrade heavy duty diesel equipment, e.g.:
 - Vehicle Replacements
 - Engine Replacements (replacements of engine only, formerly called repowers)
 - Retrofits (after-treatment devices to reduce tailpipe emissions)
 - Anti-idling technology
 - Engine Upgrades
 - Clean Fuels (NO stand alone)
 - Aerodynamic/Low Rolling Resistance technology
- On-road, non-road, marine, locomotive

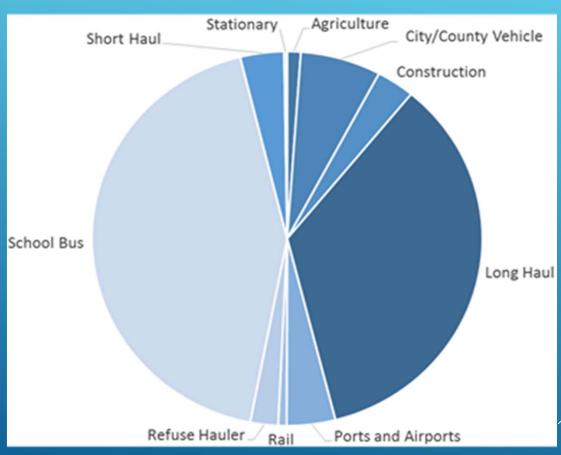
3RD DIESEL REPORT TO CONGRESS (FEB 2016)

- 2009-2013, including ARRA
- Highlights from the Diesel Emission Reduction Program
 - Reduced 335,200 tons of NOx
 - Reduced 14,700 tons of PM
 - Saved 450 million gallons of fuel
 - Prevented 4.8 million tons of CO2 emissions equivalent to the annual CO2 emissions from more than 900,000 cars
 - Clean diesel funding generates up to \$13 of public health benefit for every \$1 spent on diesel projects
 - https://www.epa.gov/cleandiesel/reports-congress

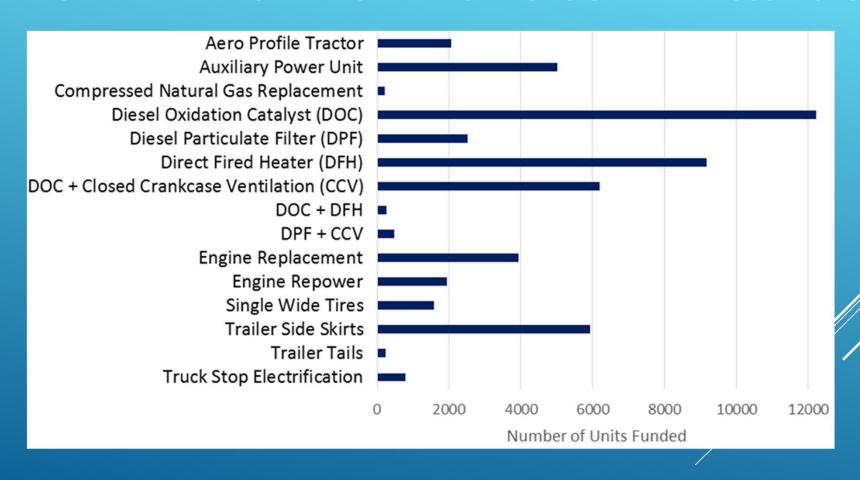
NATIONAL DERA PROGRAM BENEFITS AND ACCOMPLISHMENTS FY 2009-2013

Investment of DERA Program	Emission and Fuel Reductions
\$520 million funds awarded	312,500 tons of NO _x
58,800 engines retrofitted or replaced	12,000 tons of PM
Up to \$11 billion in monetized health benefits	18,900 tons of hydrocarbon
Up to 1,700 fewer premature deaths	58,700 tons of carbon monoxide
81% of projects targeted to areas with air quality challenges	4,836,100 tons of carbon dioxide
3:1 leveraging of funds from non-federal sources	431 million gallons of fuel

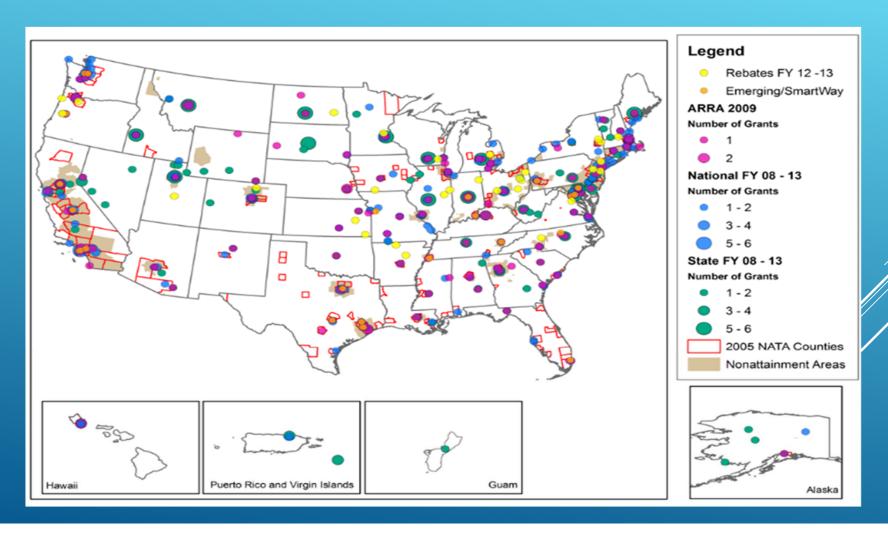
NATIONAL DERA FUNDED SECTORS 2009-2013 (INCLUDES ARRA)



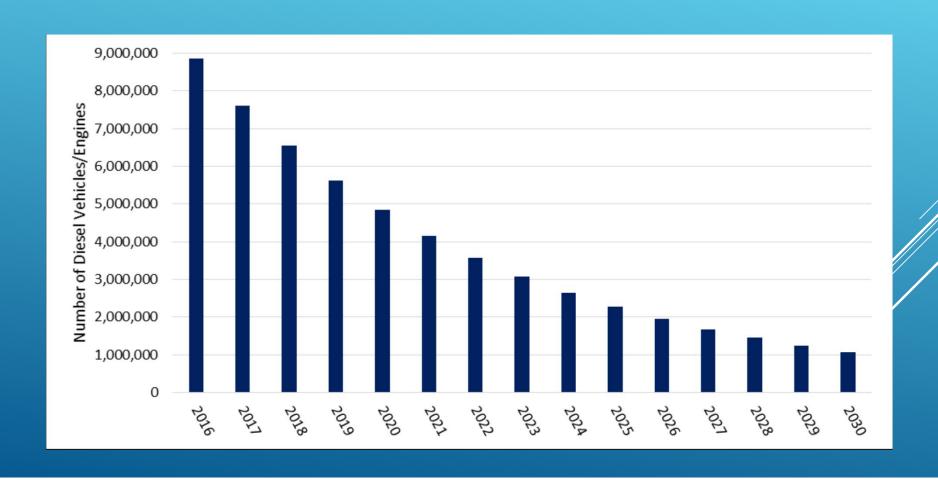
NATIONAL DERA FUNDING BY TECHNOLOGY TYPE 2009-2013



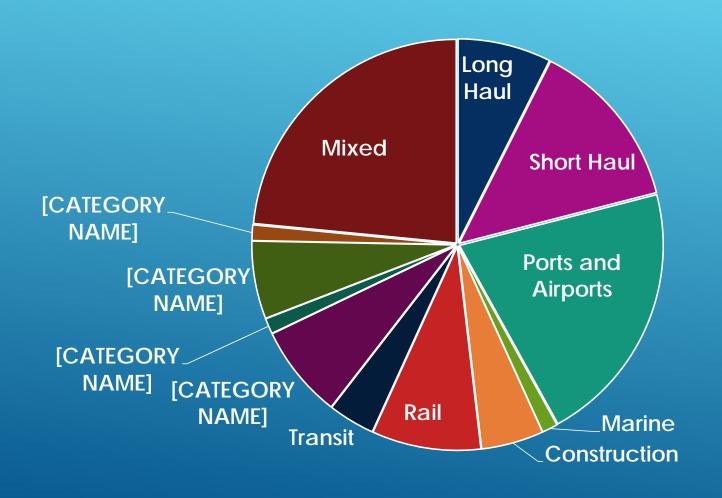
NATIONAL DERA PROJECTS 2008-2013



HEAVY POLLUTING DIESEL ENGINE TURNOVER BY YEAR IN THE U.S.



REGION 3 DERA GRANTS BY VEHICLE TYPE (2008-2015)



RECENT PORTS DERA WORK

- ▶ 21 port projects in region 3 have been funded under the Diesel Emissions Reduction Act, replacing or upgrading hundreds of vehicles including:
 - **►** Harbor craft
 - Rail units
 - Cargo handling equipment
 - Drayage trucks
- Grants awarded in the last 3 years to ports project are expected to achieve more than:
 - ▶ 1,500 tons of NOx
 - > 74 tons of particulate matter
 - > 76 tons of hydrocarbons
 - > 540 tons of carbon monoxide
 - ➤ Nearly 28,000 tons of carbon dioxide

CAPITAL ELITE - REPOWERED 3 MARINE DIESEL ENGINES - WASHINGTON, DC





Lifetime Reductions in tons: 42.37 NOx; 1.227 PM; 0.442 HC; 3.056 CO; 200,000 gallons of lifetime fuel savings expected.

CAPE MAY - LEWES FERRY REPOWER





Location: Lewes, DE 116 Tons of NOx, 1.37 of tons PM, and 12 tons of ©O reduced



MES PORT OF BALTIMORE DRAY/ TRUCK PROGRAM

VOLKSWAGEN SETTLEMENT APPENDIX D: MITIGATION TRUST FUND

- \triangleright Volkswagen will fund a \$2.9 billion mitigation Trust Fund to fully mitigate the total, lifetime excess NO_x emissions from the 2.0 and 3.0 liter vehicles.
 - ➤ The allocation structure is primarily based on the number of registered illegal Volkswagen vehicles within the boundaries of the beneficiary.

State	Allocation
Delaware	\$9,051,682.97
District of Columbia	\$7,500,000.00
Maryland	\$71,045,824.78
Pennsylvania	\$110,740,310.73
Virginia	\$87,589,313.32
West Virginia	\$11,506,842.13

Eligible Mitigation Projects

- Class 8 local freight trucks and port drayage trucks
- 2. School/shuttle/transit bus
- 3. Locomotive switchers
- 4. Ferries/tugboats
- Ocean going vessels-shorepower
- 6. Class 4-7 local trucks
- 7. Airport ground support equipment
- 8. Forklifts and CHE
- 9. Light duty ZEV supply equipment (up to 15% of allocation)

DERA Option (#10)

- Option to use Trust Funds for actions not specifically listed but otherwise eligible under DERA
- Beneficiaries may use TrustFunds for their DERA nonfederal voluntary match
- State and tribal DERA grants only

TIMING OF PARTIAL SETTLEMENT TRUST FUND

- ▶ October 25, 2016: Consent Decree finalized
- ▶ "Trust Effective Date" Oct. 2, 2017
- Dec. 1, 2017 (60 days) States certify as Beneficiaries
- > States must submit mitigation plans 30 days before requesting funds from Trust
- > States are responsible for determining eligibility of projects

CORE ELEMENTS OF



The SmartWay Transport Partnership

► Freight shippers, carriers, logistics companies and other stakeholders partner with EPA to measure, benchmark and improve logistics operations so they can reduce their environmental footprint.

The SmartWay Brand

► Through SmartWay technology verification and branding, EPA has accelerated availability, adoption and market penetration of fuel-saving technologies and operational practices while helping companies save fuel, lower costs and reduce adverse environmental impacts.

SmartWay Global Collaboration

► EPA works with a broad range of national and global organizations to harmonize sustainability accounting methods in the freight sector. SmartWay also provides support to global policy makers that wish to model transportation sustainability programs after the SmartWay program.

SmartWay Partners

Any company or organization that ships, manages, or hauls freight can become a SmartWay Partner. There are three types of SmartWay Partners:

- SmartWay Shippers are companies and organizations that ship or receive freight.
- SmartWay Carriers are companies that carry or move goods for shippers.
- SmartWay Logistics Companies are companies that hire freight carriers and manage freight shipments for shippers.

Companies and organizations that do not ship goods directly but want to support freight supply chain sustainability may be eligible to participate in SmartWay as SmartWay Affiliates.

SmartWay Affiliates educate their members and customers about the SmartWay Program and encourage them to join the partnership.



Thank you!

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https://www.epa.gov/cleandiesel