Lessons from the Mid-Atlantic Voluntary Dray Truck Replacement Program

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• Leverage resources and expertise
• Promote collaboration and coordination
• Raise awareness: how and why to reduce diesel emissions
Presentation Overview

- Motivation – Why Dray Trucks
- Program Description
- Results
- Lessons Learned
Motivation

• Areas not meeting air quality standards
• Older vehicles with high emission rates
• Growth in container business anticipated
2007 and 2010 Engines

• New technology meets stricter emissions standards
• Replacing old trucks reduces adverse impacts on surrounding communities
Program Description

• Goal: Replace about 110 dray trucks with 2008 or newer vehicles
  • Hampton Roads
  • Baltimore
  • Philadelphia
  • Wilmington, DE
Program Staffing

• University of Maryland Environmental Finance Center (EFC)

• Mid-Atlantic Regional Air Management Association (MARAMA)
Key Requirements

- Old engine MY ’03 & older
- Own truck for at least a year
- Active port service
- Street legal
- New engine MY ’07 & newer
- Scrap old truck
Timeline

2009-2010
Obtain grant & build staff team

2011
Stakeholder outreach & begin replacing trucks

2012 -14
Partners, sponsors on board. Replace trucks
Program Structure

- Stakeholder outreach
- Recognition for leveraged support
  California Cartage
  Champion Truck Lines
- Screened & recommended
  Lenders
  Truck venders
  Scrap yards/recyclers
Results

- 343 Applied
- About 3/4 Approved
- 45 Withdrew
- 212 Trucks Replaced
Results Exceeded Goals

Goal = 110

Result = 212
Number of Trucks Replaced by Calendar Quarter
Early Replacement Achieved

- Scrapped trucks
  Average MY 1994 ('84 - '03)
- Replacement trucks
  Average MY 2009 ('06 - '13)
  33 were 2010 or later
Replacement trucks were about 10 to 15 years newer than scrapped trucks.
Cost of trucks

- Average truck price – $52K
- Program incentive – up to $20K per vehicle (not over half the cost)
- Owners invested $6.7 million
Program Funding
Emissions Reductions Achieved

• 30% reduction in NOx emissions over the lifetime of the trucks replaced (Over 3000 tons)
• 20% reduction in lifetime PM2.5 emissions (About 150 tons)
Lessons Learned

• Sufficient grant support will leverage early replacement

“I would never have been able to purchase a new truck if not for this program.”
Lessons Learned

• Port Support is essential--Financial & Programmatic
Lessons Learned

• Build on prior success
• Work with a team of stakeholders to design a program that works for your area
Lessons Learned

• Outreach takes thought, time, and effort
• Ongoing education is needed
• Word of mouth is important
Lessons Learned

Key players

• Truck vendors
• Lending institutions
• Scrap yards & recyclers
• Carriers & associations
• Other grant recipients
Lessons Learned

• Have applicants determine their financial readiness
• Minimize time between scrapping and providing down payment
Lessons Learned

• Adapt when things don’t work as planned
• Stay in touch with applicants during process
• Is it time for MY 2010?
For more information:
http://www.efc.umd.edu/cleandiesel