The Philadelphia Diesel Difference:
A Partnership for Cleaner Air.

Problem in Philadelphia

- **Philadelphia ranked 5th worst in the nation for greatest public health risk associated with air toxics.**
- **Estimated 3,085 cancers caused by diesel particulate.**
- **Diesel vehicles comprise only 7.5% of the vehicle miles traveled in PA yet contribute 48% of the summertime NO_X and 65% of fine particulate matter derived from highway vehicles .**

Air Quality Impact for Philadelphia

- Diesel particulate (soot)
  - Likely to be in non-attainment for $PM_{2.5}$, of which a significant portion is $PM_{diesel.}$
- Smog
  - Non-attainment for 1-hour ozone standard.
  - Non-attainment for 8-hour ozone standard.
- Air Toxics
  - Mobile sources most significant.

Health Effects of Diesel Exhaust

- Chronic respiratory diseases.
- Bronchitis.
- Asthma.
- Known carcinogen.
- Children adversely affected.

Clean Diesel Technologies

- Menu of options
  - Hardware
    - Particulate traps/filters
    - Oxidation catalysts
  - Clean Fuels
    - Ultra low sulfur diesel fuel
    - Emulsified Diesel Fuel
    - Bio-diesel
  - Idling Reduction Technology
  - Combination of the above
- EPA and CARB Verified Technologies

Future of Diesel Marketplace

- **Mid-2006: Ultra low sulfur diesel is required for all on-road diesel vehicles.**
  - **Sulfur content of diesel #2 reduced from 500 ppm to 15 ppm.**
  - **97% reduction in sulfur content.**
- **2007: Original equipment manufacturers produce engines with cleaner exhaust systems.**

Societal Costs

- Premature death.
- Asthma related emergency room visits.
- Hospitalizations.
- Heart attacks.
- Lost work days.
- Lost productivity.
- Decreased quality of life.

Challenge

- Diesel engines have a 20-35 year lifespan.
- Existing diesel engines require retrofits to bring them up to newer standards.
- Retrofits can cost up to more than $6,000 per vehicle.
- ULSD not mandatory until 2006.

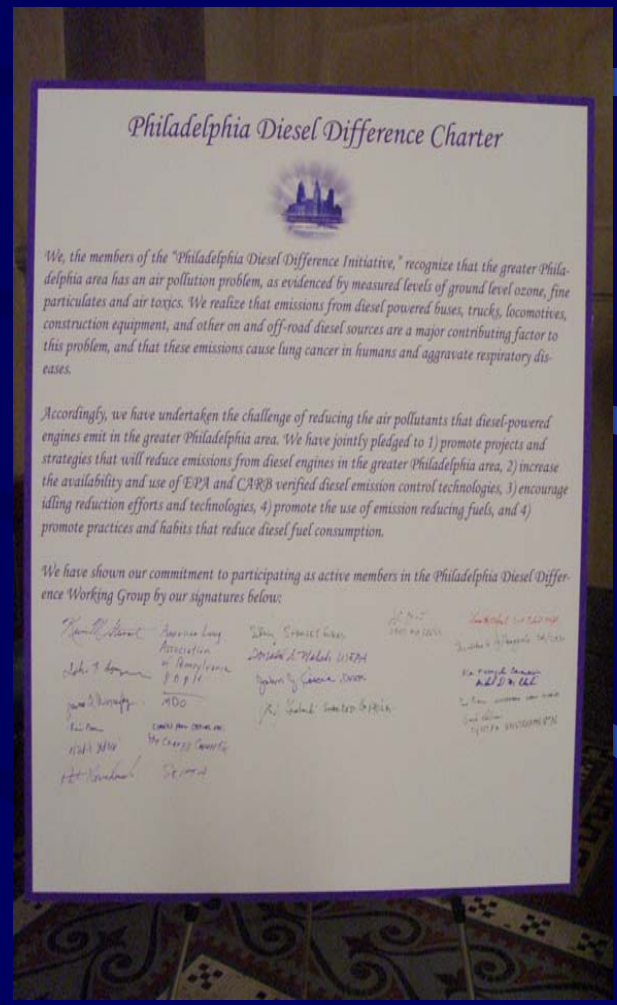
Philadelphia Diesel Difference

- Supports the voluntary implementation of clean diesel technologies on diesel powered engines.
- Coalition of diverse partners:
  - Public, private, and not-for-profit sectors.
- Working Group of over forty members.
- Outreach and education, funding, technical assistance, non-monetary recognition.

Diesel Difference Charter

- **Demonstrates commitment to supporting the Philadelphia Diesel Difference.**
- **Endorsements include:**

- **American Lung Association of Pennsylvania**
- **Citizen's for Pennsylvania's Future**
- **City of Philadelphia, Department of Public Health**
- **City of Philadelphia, Managing Director's Office**
- **City of Philadelphia, Office of Fleet Management**
- **Clean Air Council**
- **Cummins Power Systems**
- **Delaware Valley Regional Planning Commission**
- **Energy Coop**
- **Pennsylvania Department of Environmental Protection**
- **Pennsylvania Turnpike Commission**
- **Sprague Energy**
- **United States Environmental Protection Agency**
- **Wissahickon School District**



Recognition Program

- Provided to fleets that implement clean diesel technologies on diesel powered vehicles.
- Three "levels" of recognition criteria.
  - Platinum, gold, and silver.
  - Based on overall emissions reductions.
- Recognition may included a press conference, plaque, press release, decal, and/or success story.
- Additional public relations and advertising opportunities.

Philadelphia Diesel Difference

Clean Diesel Vehicle

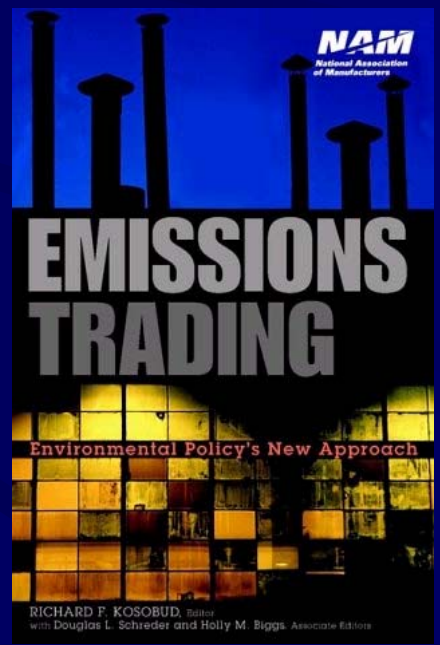
Corporate Sponsorship Program

- To aid in the facilitation of implementing clean diesel technologies in area diesel fleets.
- Financial and in-kind services welcomed.
  - Include pro-bono public relations and consulting services.
- Donations are tax-deductible, through an account with the Clean Air Council.
- Focuses on presentations to targeted audiences of potential donors.

Clean Air Council

Mobile Source Emissions Reduction Credits

- Aid in cost defrayal from retrofit projects.
- Must be quantifiable, enforceable, permanent, and surplus.
- Sold by a participating retrofitted fleet.
- Purchased by a stationary source in need of offsets.

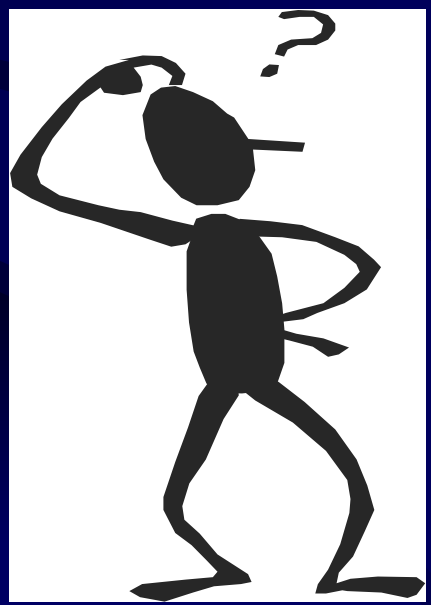


Outreach and Education

- **Partner with the Clean Air Council through a Mobile Source Outreach grant.**
  - **Website.**
  - **Outreach materials.**
  - **Quarterly newsletter.**
  - **Tabling at public events.**
  - **Individual consultations.**
  - **Funding announcements.**
  - **Registry of interested fleets.**
  - **Anti-idling promotion.**

Accomplishments

- Successful Kick-off event in May 2003.
- Organizational Structure.
- Seven ad-hoc sub-committees.
- Diesel Difference Charter.
- Two winners of PA DEP grant settlement.
- Recipient of $20,000 from EPA Region III for air toxics risk mitigation.
- Created account on behalf of Clean Air Council to accept donations.

Additional Information

- **Http://www.epa.gov/otaq/retrofit**
- **Http://www.cleanair.org/dieseldifference**
- **Diesel Difference/Corporate Sponsorship:**
  - **Eric Cheung, Clean Air Council**
    - **echeung@cleanair.org, (215) 567-4004, Ex. 237**