

**The Foodservice Distribution
CONFERENCE & EXPO**
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Greening Your Supply Chain to Save Fuel and Money

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US EPA**

SmartWay Transport Partnership

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Outline

- Transportation Background
- SmartWay Transport Partnership
- Fuel Saving Technologies and Strategies
- Transportation Supply Chain
- Marketing & Partner Recognition



Background

- **Commercial freight truck and rail:**
 - Travel over 200 billion miles
 - Consume over 55 billion gallons of fuel today
 - Account for about 20% of transportation related energy use
 - Produce approximately 350 million metric tons of CO₂

**55 billion
gallons of
gasoline and
diesel**





Growing Concerns About Transportation & Climate Change

US Oil Consumption



Personal Vehicles 40%

Other Transportation 27%

Other Sectors 33%

Transportation accounts for about: 2/3 of oil consumption and 1/3 of total CO2 emissions.

US Carbon Emissions



Other Sectors 68%

*Includes all fuel sources



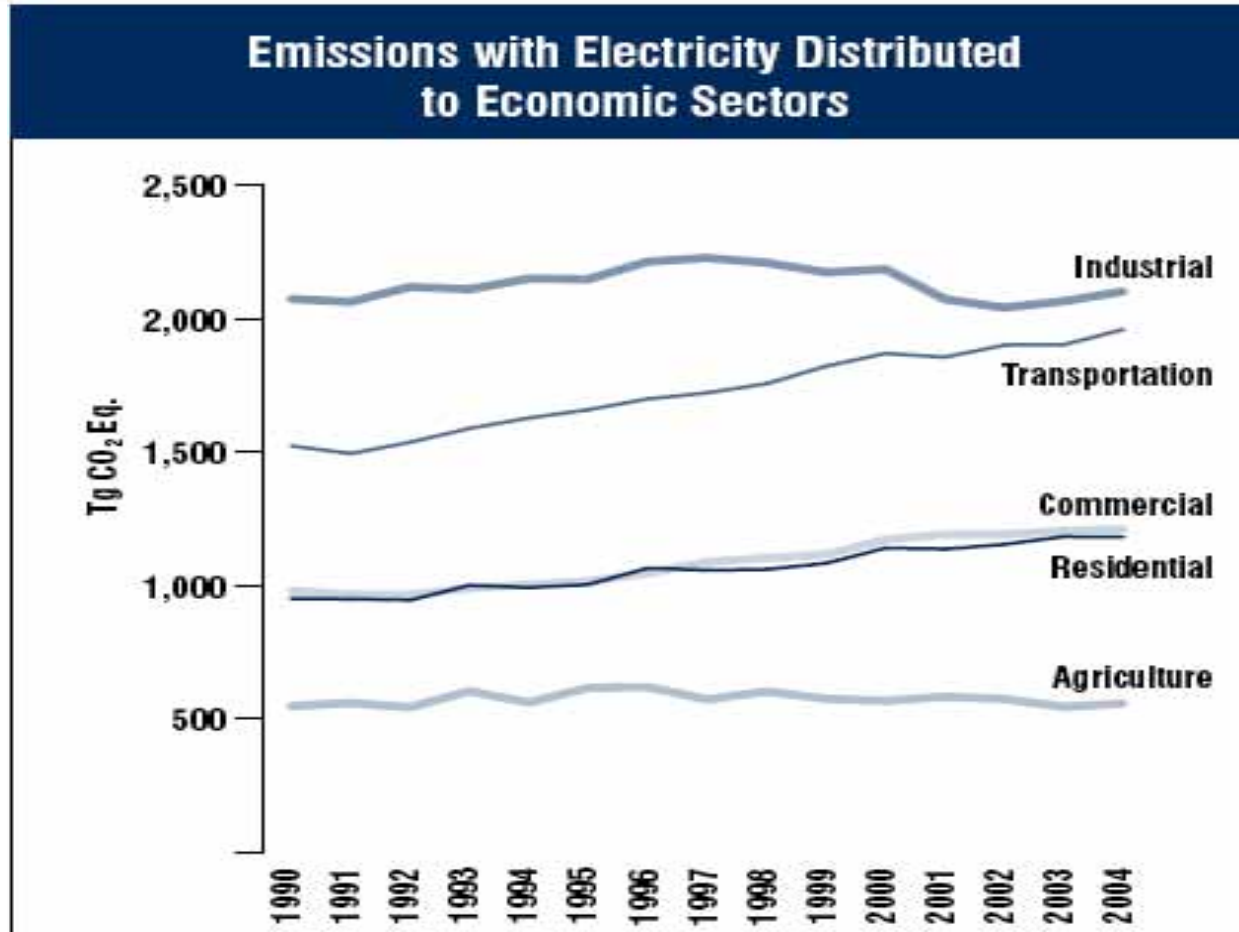
Other Transportation 13%



Personal Vehicles 19%



Transportation Greenhouse Gas Emissions Continue to Increase



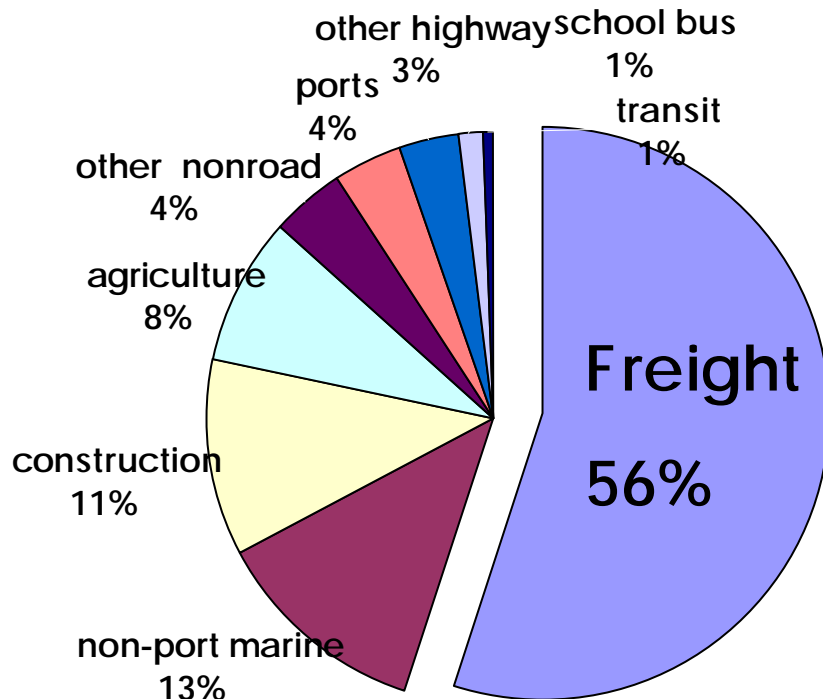
Source: US Emissions Inventory (April 2006)

EPA 430-R-06-002

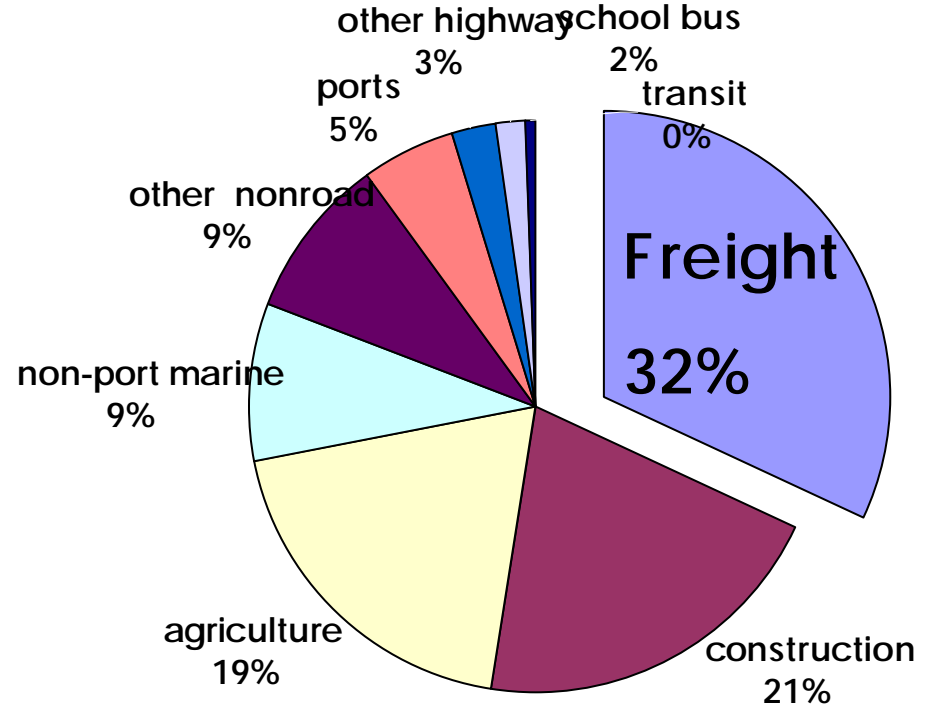


Mobile Source Diesel Emissions Inventory by Sector (2004)

NO_x
(6.3 million tons)



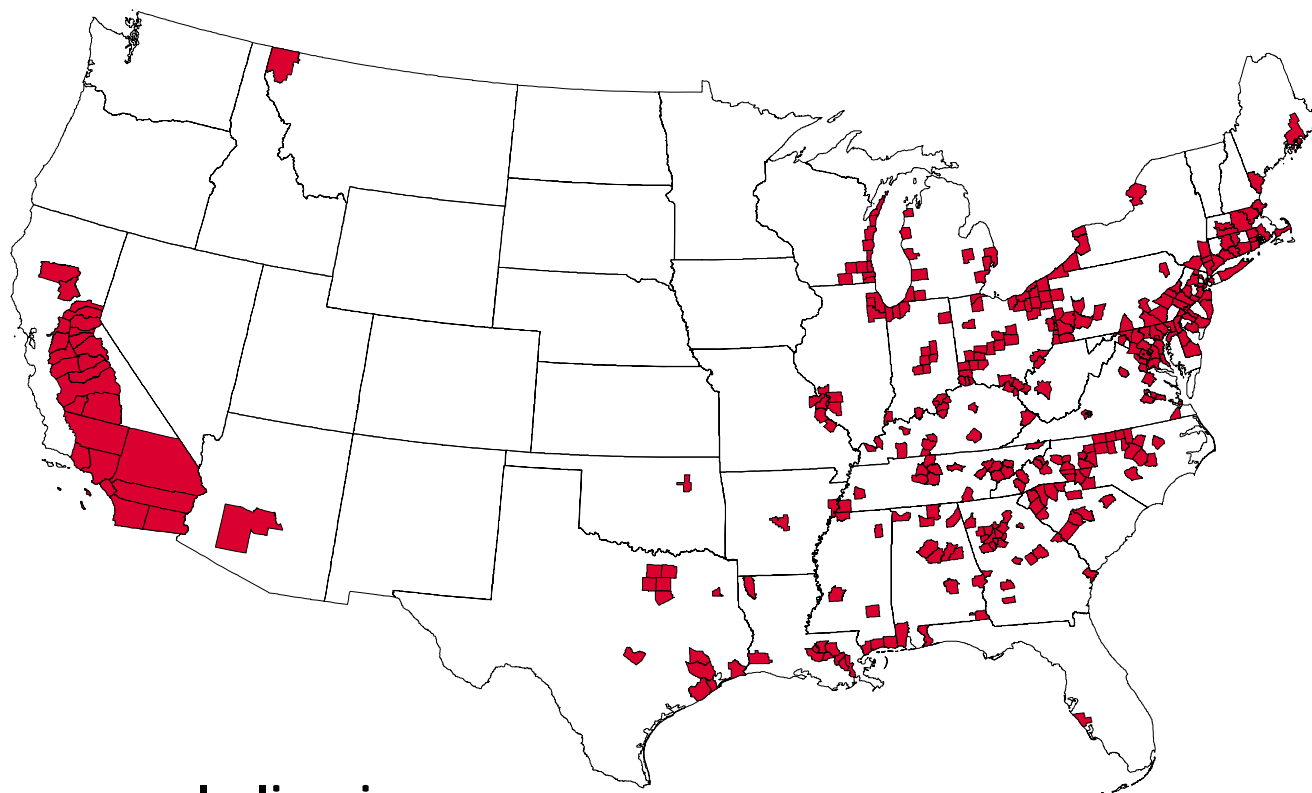
PM 2.5
(305,000 tons)





Air Quality Impacts

Counties Currently Violating Fine Particle (PM_{2.5}) and/or Ozone Standards (based on 1999-2001 data)



-80 million people live in areas that do not meet particulate standards.

-160 million people live in areas that do not meet ozone standards.



Communities are taking steps





Your customers and your clients are noticing...





Fuel Trends

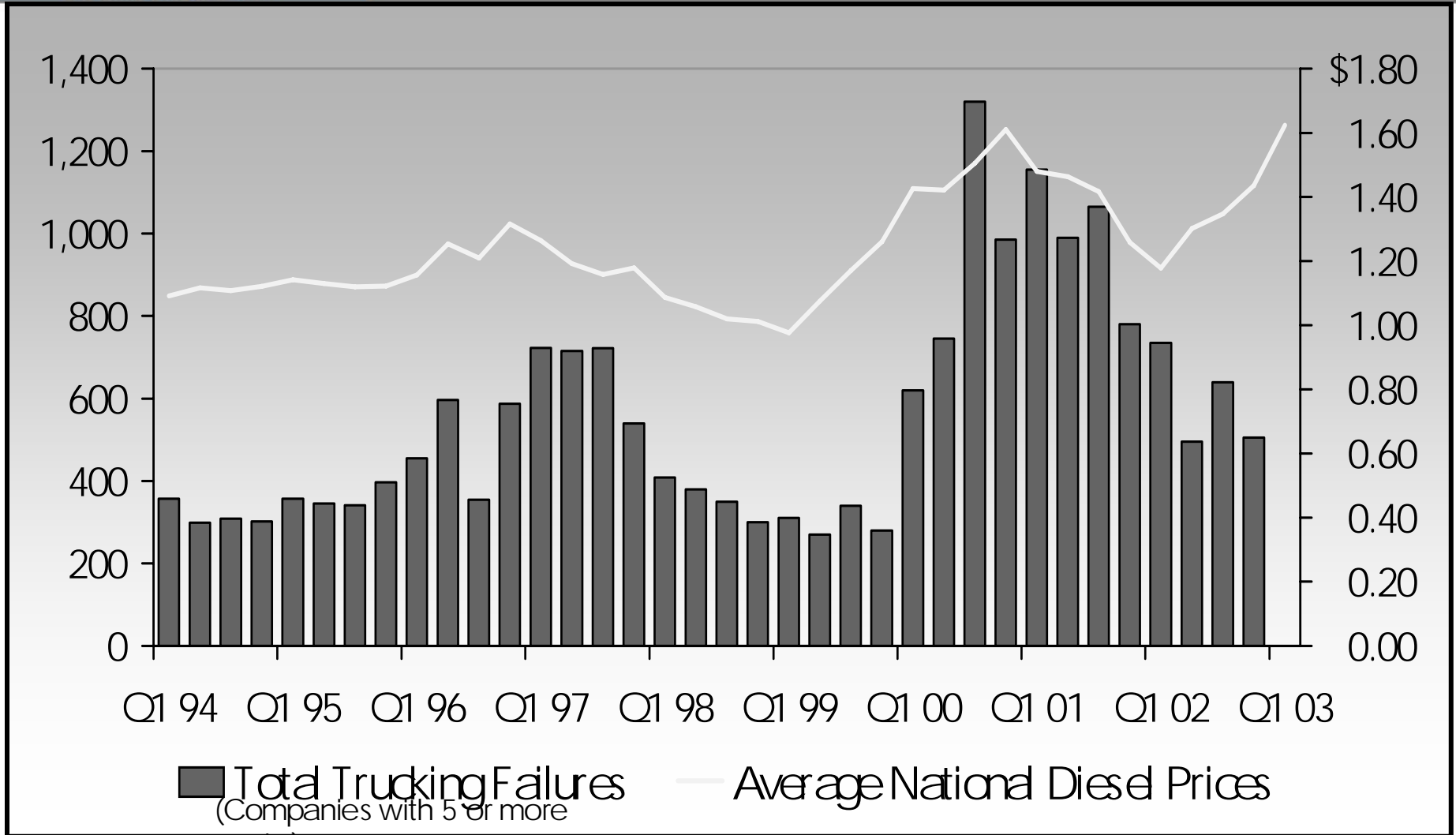
**Weekly U.S. Retail On-Highway Diesel Prices
Average All Types**



Source: Energy Information Administration



Fuel Prices Impact on Industry



Source: A.G. Edwards, US Department of Energy, and ATA



Recent Developments

- State and local authorities are addressing climate change by establishing greenhouse gas reduction measures; CA, HI, NJ, FL, New York, Chicago, etc.
- The Supreme court ruled 3/2/07 that CO₂ is a pollutant under the Clean Air Act and EPA has authority to regulate CO₂ emissions;
- The President issued an Executive Order 5/14/07 for regulations that would reduce gasoline consumption and greenhouse gases by 20% in ten years;
- Congress now working on climate change by considering wide range of energy bills, many of which include transportation as a key element.



So what can a corporate citizen do to make a difference?...

Consider your transportation carbon footprint.

How can you
reduce your
Carbon
Footprint?





The Partnership



SmartWay Transport Partnership

- Voluntary Partnership w/ground freight industry
- Opportunity for companies to enhance performance of freight operations & supply chains
- Emission Reduction Goals
 - 150 million barrels of oil each year (12 million cars off the road)
 - 33-66 million metric tons CO₂ annually by 2012
 - 200,000 tons NOx annually, plus PM and air toxics reductions



SmartWay Transport Partners today...

- Over 600 SmartWay Partners
- Drive approximately 400,000 trucks
- Travel nearly 16 billion miles per year
- On track to:
 - reduce greenhouse gas emissions by over 3.9 million tons of carbon dioxide emissions per year by end 2007
 - Equivalent to emissions from 680,000 cars
 - Save over 335 million gallons of diesel fuel per year
 - Save the trucking industry nearly one billion dollars in annual fuel and maintenance costs.



Technologies and Strategies



Truck Stop Electrification





Advanced Truck Stop Electrification





Advanced Truck Stop Electrification

Night Light
Lighted On/Off Button for the screen, so you can find it easily in the dark

Card Reader
Slide your member Card and follow instructions

Built-In Touch Screen Computer
Control your "Home-On-The-Road" and surf the Internet

Help
Available 24x7. On-Screen Context-Sensitive Help or dial 611 from your cab phone or 800-738-7024 from any phone

Go Buttons
One-Touch Access to Main Functions

USB Ports
Use a keyboard, mouse or other USB devices

120V ShorePower
Inside and Outside your cab for appliances, block/fuel heaters and other accessories

Internet
High-Speed Ethernet Port for Internet on your Computer - Wireless Internet also available

Telephone
Plug in a regular phone for incoming and outgoing calls

Television
Connect your TV with standard COAX cable for Premium Satellite TV

Central Heat & Air
Thermostat controlled filtered air flow, recycled from your cab



Idle Reduction Technologies

For Trucks and Locomotives

Average fuel savings

Trucks: 1 gal/hr

Rail: 4 - 12 gal/hr

Emissions Controlled

CO₂, NO_x, and PM

- Automatic Shut-Down/Start Up System
- Battery Powered Systems
- Diesel Driven Heating System
- Auxiliary Power Unit/Generator Set
- Truck Stop Electrification





Low Rolling Resistance Tires

Single Wide Base and Improved Duals

Average fuel savings

Trucks: 4 - 5%

- Single-wide tires and aluminum wheels
 - Reduced rolling resistance
 - Reduced weight
- Low rolling resistance duals can be as effective as singles

Emissions Controlled

CO₂, NOx





Trailer Aerodynamics

Average fuel savings Emissions Controlled

Trucks: 5%

CO₂, NO_x

- Trailer Fairings, Side-skirts
- Nose Cone and Trailer Tail



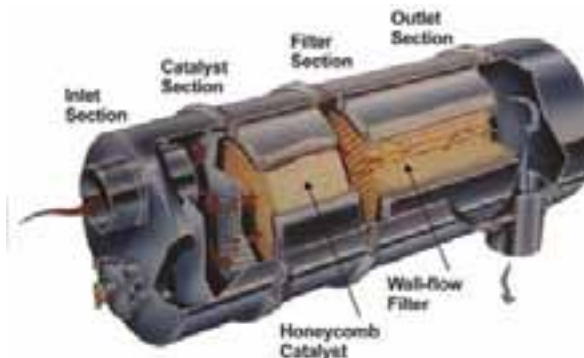


Exhaust After-Treatment Devices

Average fuel savings Emissions Controlled

PM

- Diesel Oxidation Catalysts
 - Estimated cost: \$1,000
 - Reduce PM by 25% - 40%
- Particulate Matter Filters
 - Estimated cost \$6,000
 - Reduce PM by 80% - 90%





The SmartWay Truck

A SmartWay Truck is 20 to 25% more efficient than an average truck on the road today.

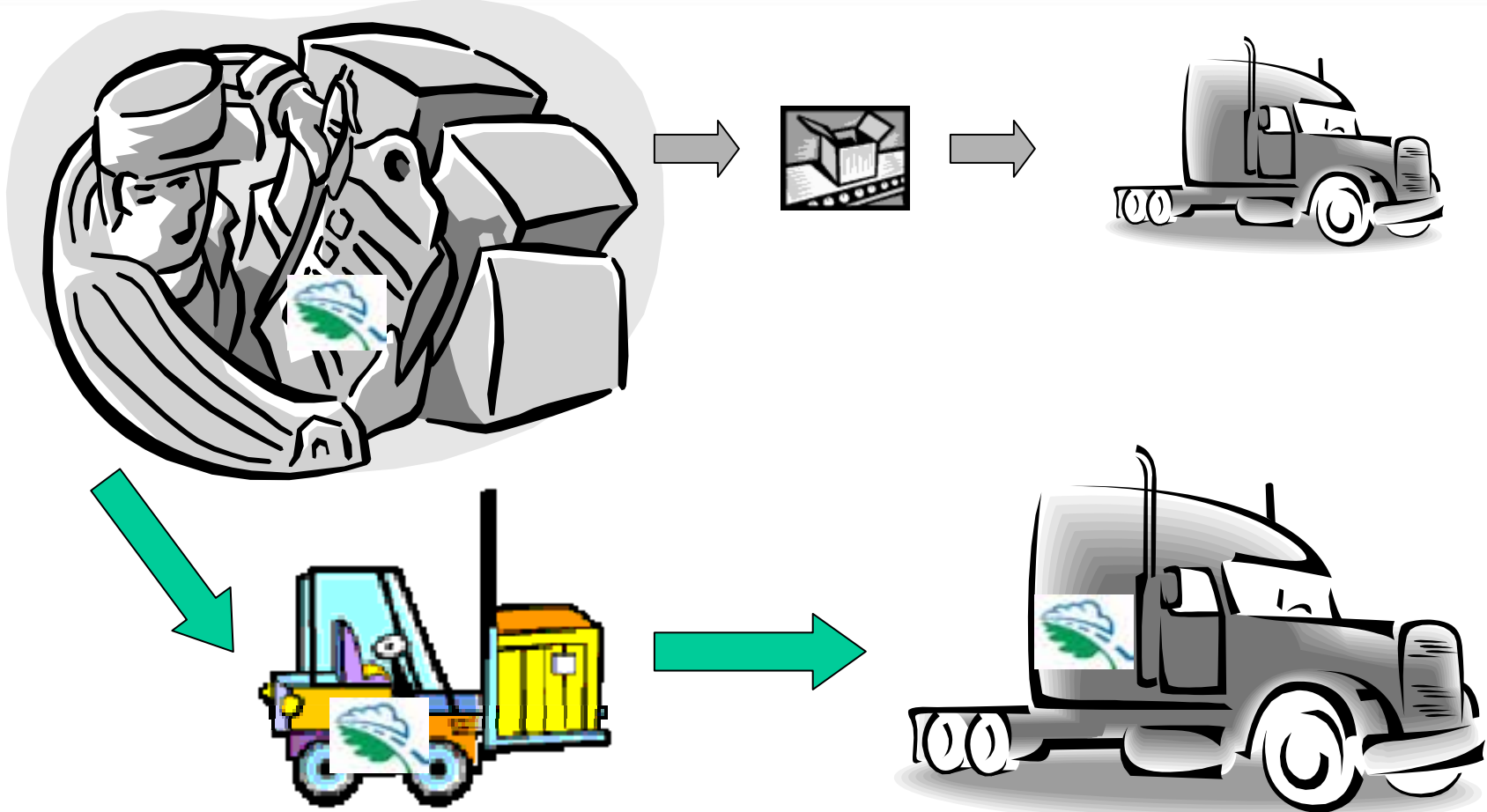
Tractor Strategies
~12% Reduction

Trailer Strategies
~11% Reduction



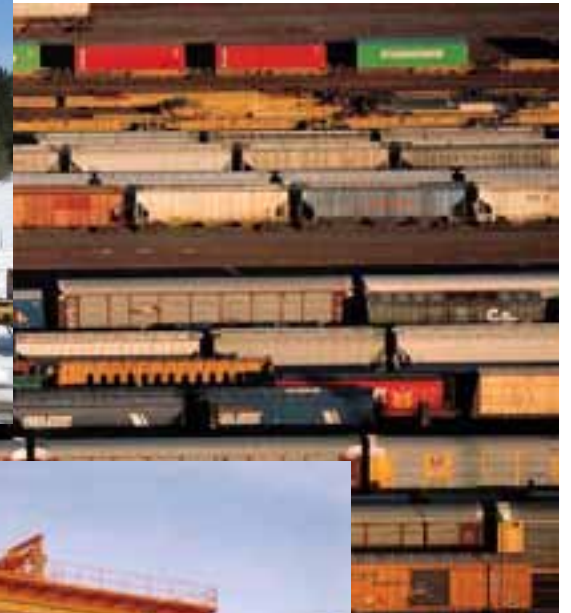
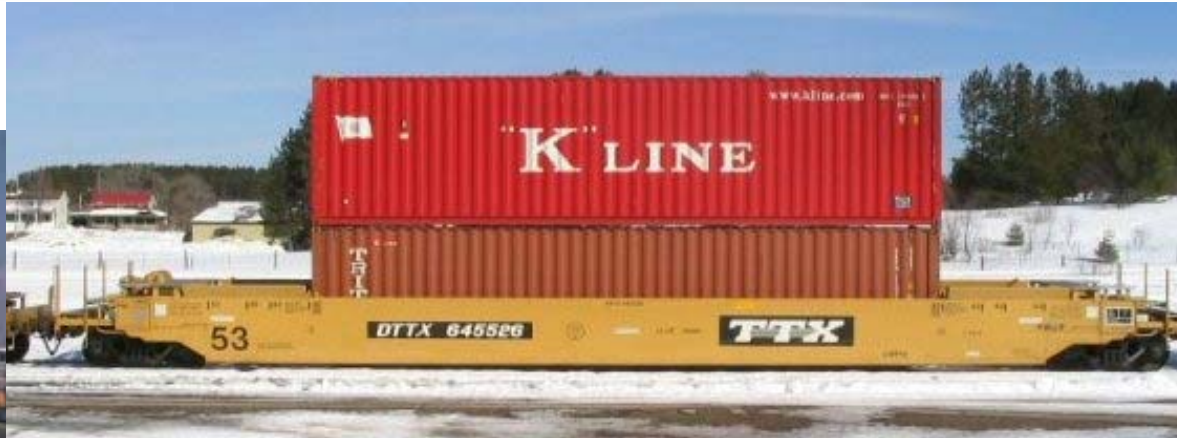


Shippers Ship more freight with SmartWay Transport Carriers





Intermodal Shipping





No-Idling Polices at Loading Facilities





Renewable Fuels

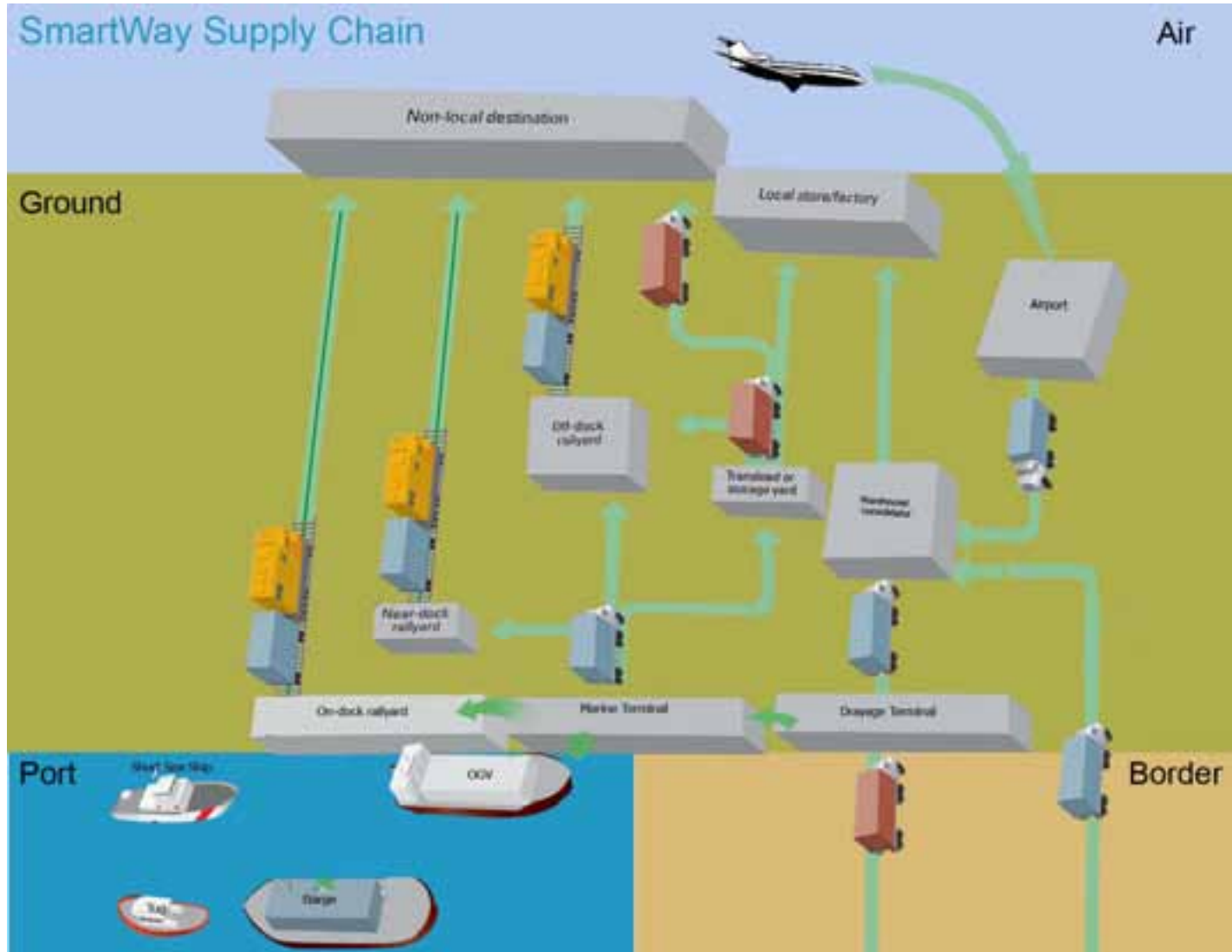




Transportation Supply Chain



What does your world look like?





What does my world look like to you?



Mid-Atlantic Diesel Collaborative

on the route to cleaner air

greater boston breathes better



Sustainable Ports & Carriers Partnership



NATIONAL CLEAN DIESEL CAMPAIGN



Alliance of the Ports of Canada, the Caribbean, Latin America and the United States



Northeast Diesel Collaborative





Transportation Supply Chain Protocol

Program Components

Partnerships - EPA packaging existing government partnerships & programs

Tools and models - allowing companies to:

- Measure multimodal transportation footprint
- Project emission reduction impacts of technology, strategy and modes

Technology Demonstration- Advance new technologies/fuels

Financial Incentives- access to capital, loan guarantees, public-private capital

Marketing/Media Campaign - Extend SmartWay brand, labeling, public education

Benefits to Industry:

- Ensures a level playing field by providing tools for corporations to measure and improve their entire supply chain transportation emissions footprint.
- Reducing the footprint responds to growing demands from shareholders, insurers, lenders and customers for more sustainable operations.
- Provides incentives and competitive advantage to more fuel efficient transportation providers.



Supply Chain emission reduction strategies and technologies

For Ocean Going Vessels:

- Cold Ironing at port
- Retrofits for existing vessels
- Low sulfur bunker fuels
- Salt Water Injection
- Mobile SCR



For Ports Equipment:

- Advanced technologies
- Hybrid Electrics



For Drayage trucks:

- Fleet turnover grants
- Scrappage of older trucks
- Retrofits for remaining trucks
- Idle controls
- Chassis pools





Marketing and Recognition

Marketing



**YOU'RE A CLICK AWAY
FROM A SMARTER SUPPLY CHAIN**



Logistics managers are constantly looking for ways to reduce costs for their customers through customized solutions. SmartWay® Transport Partnership is one smart money-saving program grounded in innovative business strategies and new technologies. SmartWay Transport is about streamlined logistics operations that reduce fuel costs while reducing greenhouse gases and other emissions.

To find out more about this collaborative program, please call 1-734-214-4767 or visit www.epa.gov/smartway.



An initiative program from the
U.S. Environmental Protection Agency

Ad Concept 2-23-07



Partner Recognition





Partner Recognition





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