

# Climate Leaders Partners Meeting

## **A Moving Target: *Tackling GHGs from Transportation***

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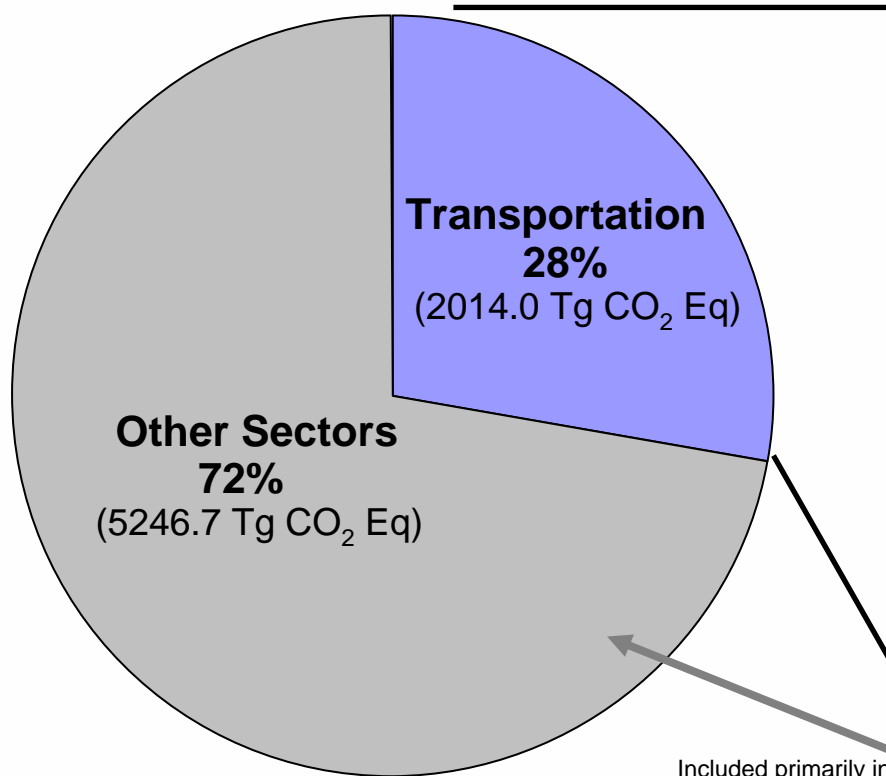
**December 5, 2007**

# The Transportation Sector

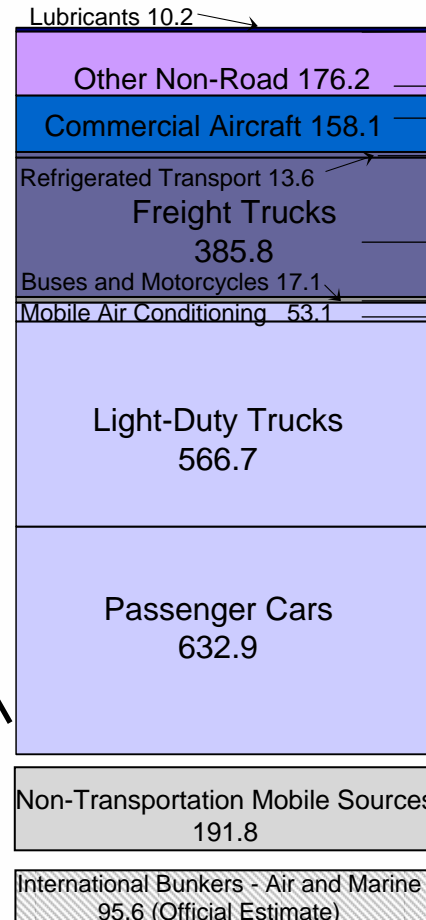


# Transportation GHGs Relative to Total U.S. Emissions

## U.S. Greenhouse Gas Emissions, 2005



## Mobile Emissions (Tg CO<sub>2</sub> Eq.)



## Share of Transportation Sector GHGs

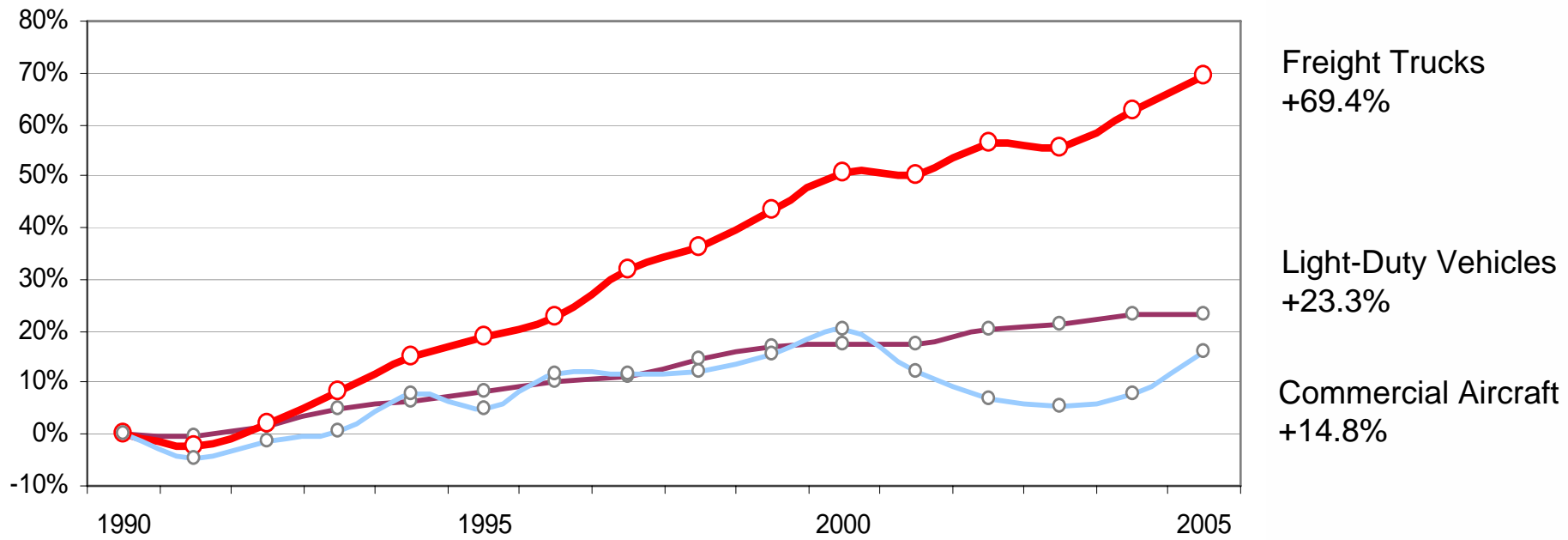


Included primarily in Industrial sector estimates

Reported in Inventory, but not included in U.S. Total GHG Estimate or Transportation Sector Estimate

Source: Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2005

# Transportation GHG Emissions Growth 1990-2005



Source: Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2005

# What is the SmartWay Transport Partnership?

- Launched in 2004
- Public-private partnership between EPA and transportation industry to conserve fuel and reduce emissions
- Now over 600 Partners
  - 387 carriers, 55 shippers, 57 logistics companies, 89 affiliates, 10 rail, plus vendors, trucks stops, and dealer/service centers
  - Includes most top trucking companies – 365,000 trucks
- 2012 Goals
  - 150 million barrels of oil each year (12 million cars off the road)
  - 33-66 million metric tons CO2 annually



# What are the commitments?

- Freight industry
  - Companies that own trucks, locomotives (**Carriers**) agree to integrate innovative fuel and emission savings technologies into their freight operations
  - Companies that hire Carriers (**Shippers**) agree to ship at least 50% of their goods with SmartWay Carriers
    - >>> **Carrier** and **Shipper** partners are given a score based on performance
  - Tailored commitments from logistics companies, technology vendors and manufacturers, trucks stops, ports, banks, dealer and service centers
- USEPA
  - Guidance and measurement tools
  - Technology research and demonstration
  - Project and policy facilitation
  - Innovative financing
  - Marketing and recognition



# FLEET Model Inventory Tool

	A	B	C	D	E	F	G	H	I	
1	Carrier Information	Current Fleet Evaluation	Current Fleet Summary	Future Fleet Evaluation	Future Summary	Show Tool Index	Print	Import to Version1.0		
2	2003 Fleet Efficiency Evaluation									
3										
4	<b>STEP 1: General Information About Your Existing Fleet:</b>									
5	<input type="text" value="2003"/>	1. For which year are you estimating the environmental performance of your fleet?							<b>2003</b>	
6										
7	<i>Show Video Tutorial</i>	<b>Single-unit Trucks</b>								
8		Total # of trucks	Average Miles per truck per year	Total Miles	Total Fuel Consumption	Average payload (tons) per trip	Average Idling Hours per truck per year	Total Idling Hours		
9										
10										
11	<b>Short Haul</b>	Diesel (Gals)			0				0	
12		Gasoline (Gals)			0					
13		Alternative Fuel	0	0	0	0	0	0	0	
14	<b>Long Haul</b>	Diesel (Gals)			0					
15		Gasoline (Gals)			0					
16		Alternative Fuel	0	0	0	0	0	0	0	
17		<b>Combination Trucks</b>								
18		Total # of trucks	Average Miles per Truck	Total Miles	Total Fuel Consumption	Average payload (tons)	Average Idling Hours per truck	Total Idling Hours		
19										

Navigation: Intro / **Baseline** / SummaryBaseline / Future / SummaryFuture / AFCurrent / AFFuture / Table / IM / J

# FLEET Model

## Emission Reduction Strategies Evaluation Tool

	A	B	C	D	E	F	G	H	I
1	Carrier Information	Current Fleet Evaluation	Current Fleet Summary	Future Fleet Evaluation	Future Summary	Show Tool Index	Print	Import to Version1.0	
2	2003 Fleet Efficiency Evaluation								0 gallon
140	<input checked="" type="checkbox"/> Idling Control Strategies								
141	Show Video Tutorial		SmartWay Truck Idling Control Strategies					Print This Table	
142	Please enter the # of HOURS each strategy was used to eliminate idling:		Combination Trucks		Single Unit Trucks		Default Idling Hours	Fuel Savings	
143			Short Haul	Long Haul	Short Haul	Long Haul			
144	Direct Fired Heater	Diesel					Short Haul		
145		Gasoline					2		
146		Alternative Fuel							
147	Auxiliary Power Unit	Diesel					8		
148		Gasoline							
149		Alternative Fuel							
150	Truck Stop Electrification	Diesel							
151		Gasoline							
152		Alternative Fuel							
153	Driver Tag Teams	Diesel							
154		Gasoline							
155		Alternative Fuel							
156	Double Drivers	Diesel							
157		Gasoline							



# Truck Technology Package Savings Calculator

**Calculator for single-owner (one truck):**

**RESULTS:**

Equipment	Cost	% Fuel Savings	Annual Fuel Savings	Monthly Fuel Savings	Monthly Loan Payment	Net Monthly Savings
APU, Tires, Aero	\$16500	17%	\$7627	\$636	(\$411)	\$225

**STEP 1: ENTER YOUR TRUCK AND LOAN INFORMATION.**

Enter your basic vehicle and loan numbers here **OR** Click the "Load Typical Values" button below for help with typical long haul truck numbers.

Annual Fuel Use  (Gallons)

Cost of Fuel \$

Annual Idling  (Hours)

Loan Period  (Months)

Loan Interest Rate  %

Yearly Fuel Cost \$ 45834

Monthly Fuel Cost \$ 3820

**STEP 2: SELECT TECHNOLOGIES OF YOUR TRUCK.**

Check the technology box below to test various combinations of technologies for your truck. You can check as many items as you want.

Technology	Cost
<input type="checkbox"/> <a href="#">Bunk Heater (Heater)</a>	\$ <input type="text" value="1500"/>
<input checked="" type="checkbox"/> <a href="#">Auxiliary Power Unit (APU)</a>	\$ <input type="text" value="8500"/>
<input checked="" type="checkbox"/> <a href="#">Aluminum Wheel Sets for Single Wide Tires (Tires)</a>	\$ <input type="text" value="5600"/>
<input checked="" type="checkbox"/> <a href="#">Trailer Aerodynamics (Aero)</a>	\$ <input type="text" value="2400"/>
<input type="checkbox"/> <a href="#">Automatic Tire Inflation (ATI)</a>	\$ <input type="text" value="900"/>
<input type="checkbox"/> <a href="#">Oxidation Catalyst (DOC)</a>	\$ <input type="text" value="1200"/>

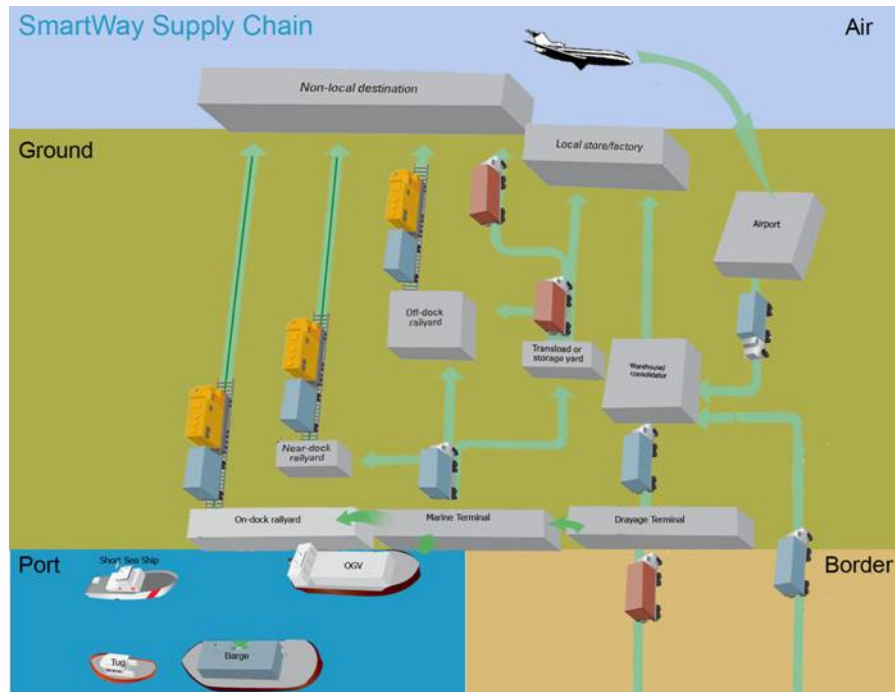
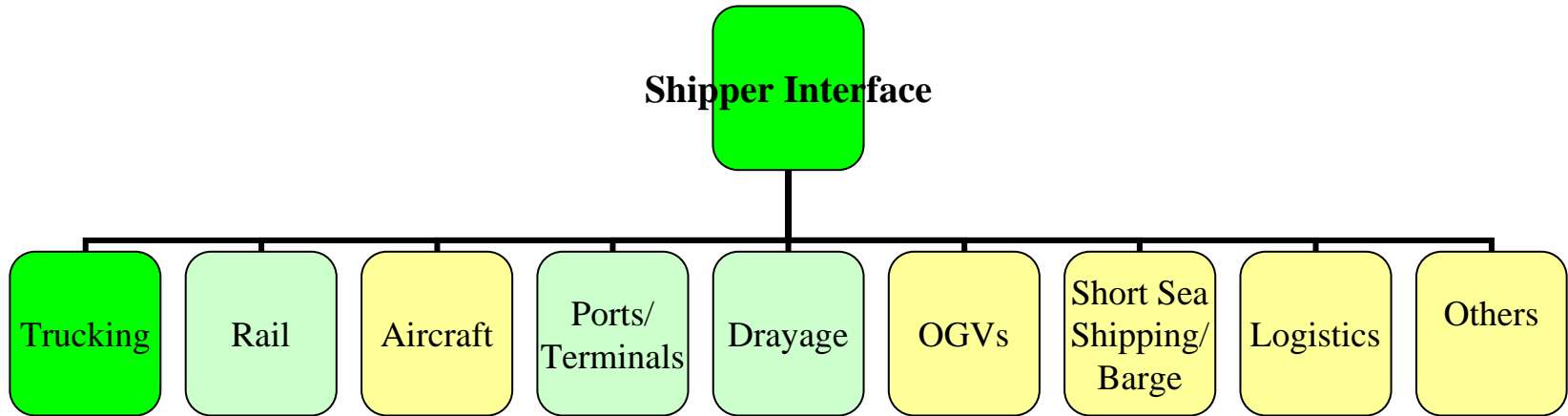
Load Typical Values

Savings Without Loan

Clear

"Savings Without Loan" button sets the loan period and interest rate to zero, to show you the results of buying this technology outright.

# Supply Chain Model



# For More Information



[www.epa.gov/smartway](http://www.epa.gov/smartway)

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# For More Information



## Shippers

### Aveda Corporation

Best Buy Co., Inc.  
BP Lubricants USA, Inc.  
[Canon U.S.A., Inc.](#) (Charter Partner)  
Chiquita Brands International  
Clean Diesel Technologies, Inc.  
Coextruded Plastic Technologies, Inc.  
Dell, Inc.  
DENSO Manufacturing Michigan, Inc.  
GlaxoSmithKline Consumer Healthcare NA  
Hewlett Packard  
Holcim (US) Inc.  
IBM Corporation  
IdleAire Technologies  
[IKEA Distribution Services, North America](#) (CP)  
[Interface, Inc.](#) (Charter Partner)  
J & J Industries, Inc.  
J.J. Keller & Associates Inc.  
JC Penney  
Johnson & Johnson Sales & Logistics Co., LLC

### Kimberly-Clark

Kohl's Department Stores, Inc  
Limited Brands Logistics Services  
Lowe's  
Marangoni Tread NA, Inc.  
Method Products, Inc.  
[Michelin North America, Inc.](#)  
Nau, Inc.  
Nestle Purina Pet Care  
[Nike, Inc.](#) (Charter Partner)  
Office Depot  
[Owens Corning](#)  
Panasonic, NA Logistics Department  
Prime Source FSE  
Richlite  
Rockwell Automation  
Schering-Plough CHC  
[Sharp Electronics Corporation](#)  
Shurepower, LLC  
STERIS Corporation  
Styline Industries  
Superslab100, Corp  
Tatung Company of America  
The TJX Companies, Inc.  
TheGreenOffice.com  
[The Home Depot, Inc.](#) (Charter Partner)  
Volvo Logistics North America  
Whirlpool Corporation

### Shipper-Carriers

Anheuser-Busch  
Bridgestone-Firestone NA Tir  
Cascades Transport, Inc.  
Coca-Cola Enterprises, Inc.  
Dennis K. Burke, Inc.  
General Nutrition Centers  
[H-E-B](#) (Charter Partner)  
Hudson's Bay Company  
Safeway, Inc.  
Schwan's Logistics, LLC  
Tyson Foods, Inc.  
U.S. Foodservice  
[Wal-Mart](#) v