



EPA SmartWay Presents

**The SmartWay to Cut
Costs and Carbon from
Your Supply Chain**



Hello!

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What We'll Cover Today

1

Why Green Freight May be the Missing Link in Your Sustainability Strategy

2

Low Hanging Fruit to Help You Meet Your Goals

3

Using SmartWay to Add Freight Efficiency Into Your Sustainability Plans

4

Over 3000 Companies Move Freight the SmartWay...Why Should You?

5

How Getting Support Can Be Easier than You Think



PART ONE

The Missing Link in Your Sustainability Strategy

Drivers for Carbon Accounting

“**Greater transparency and disclosure** can ultimately lead to better long-term value creation.”

-- Erika Karp, Head of Global Sector Research, UBS

“We understand that climate change risk is real and that **reliable information** is critical to the development of sound business, market and policy solutions.”

-- Peter Grauer, Chairman, Bloomberg

“The growing acceptance of nonfinancial reporting reflects a trend in the marketplace in which **nonfinancial information is being used to inform investment decisions**... Investors expect investment-grade reporting.”

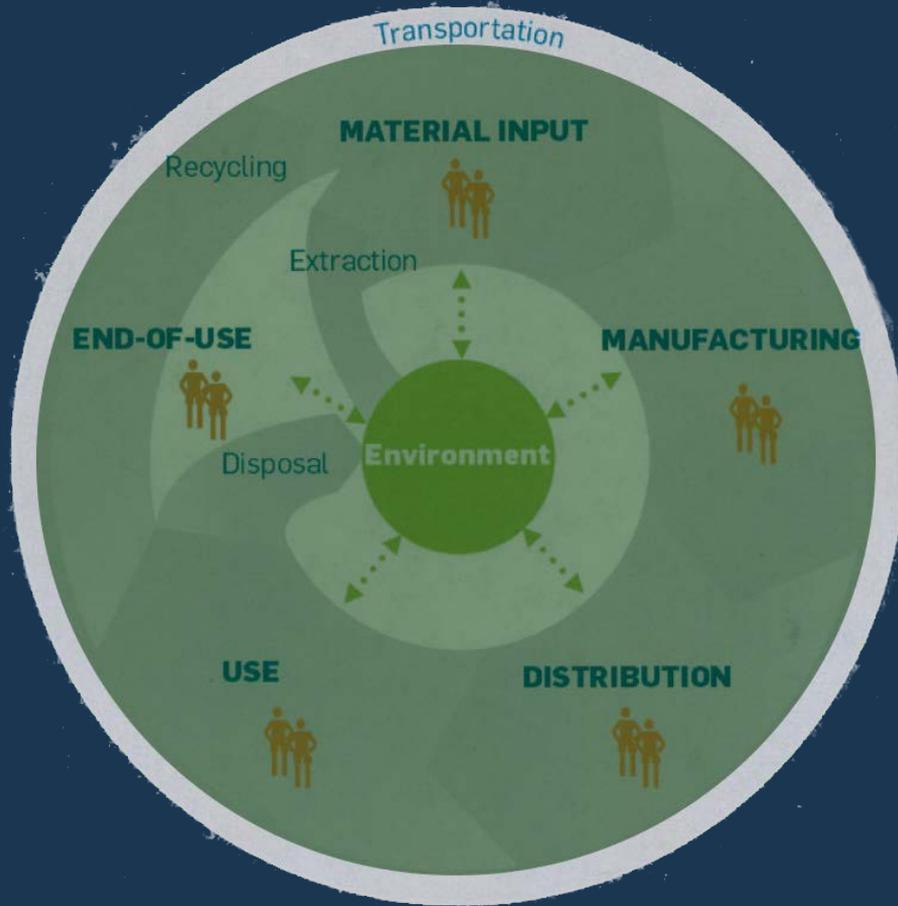
-- Doug Kangos,, Partner, Price Waterhouse Cooper

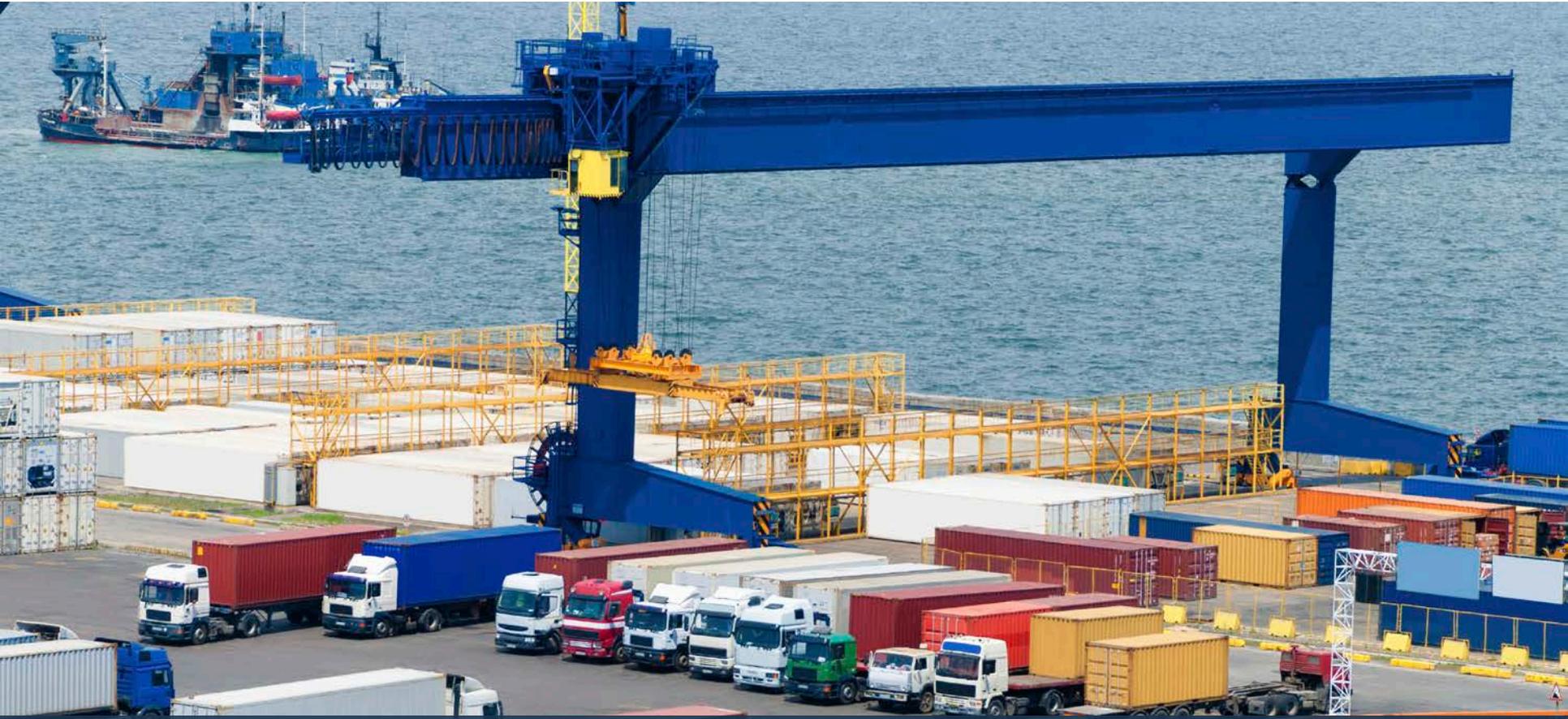
“The future will belong to innovative companies that understand that building long-term shareowner value and being an industry leader requires the integration of sustainability principles at every level...and through the supply chain. We need to press for **robust public disclosure** by companies so we can determine whether they are preparing to meet global challenges.”

-- Anne Stausboll, CEO CalPERS



SUPPLY CHAIN





Freight Transportation Touches Everything



Transportation logistics costs
\$836 billion (5.4% of GDP)

Freight Sector Environmental Impacts

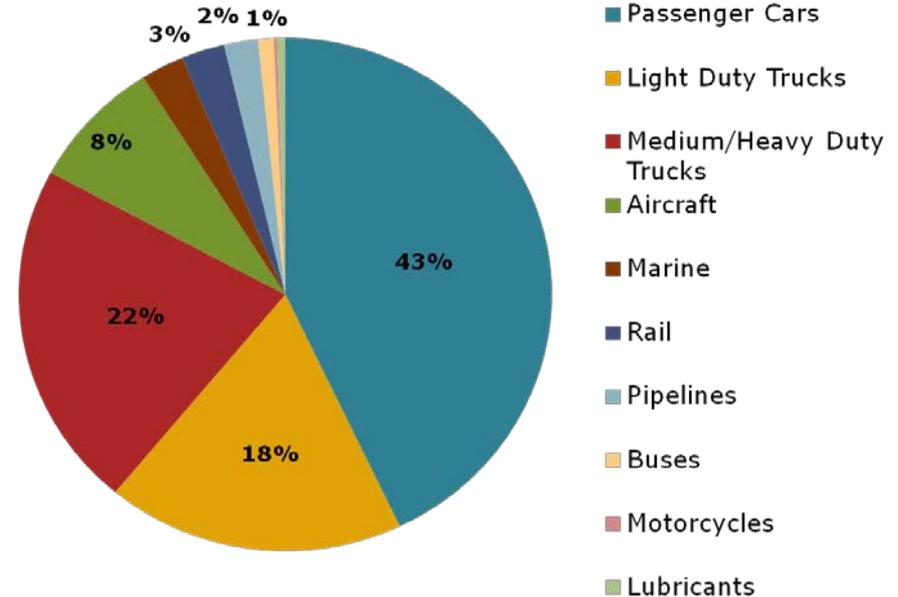
Transportation in U.S.:

- Over 1/4 total GHG emissions;
- About 2/3 petroleum-based fuel use.

In Transport Sector:

- Freight accounts for over 25% of all fuel consumed and GHGs emitted.

Transportation Greenhouse Gases



2011 Data - Inventory of U.S. Greenhouse Gas Emissions and Sinks (EPA 2013)



Freight is fastest growing
source of transport GHGs.

Why Is It Missing From So Many Plans?

- Not on the front burner
- Separation between transportation planners and sustainability managers
- Don't know how to get the data
- Don't know where to begin

PART TWO

Low Hanging Fruit to Help You Meet Your Goals



Use SmartWay to Identify Corporate Goals





You Can't Change What You
Don't Measure



Use SmartWay Registered Carriers





SmartWay registration is
short hand for more
efficient carriers



Kimberly-Clark



Share the Load—Co-Loading





Share the Load—Co-Loading





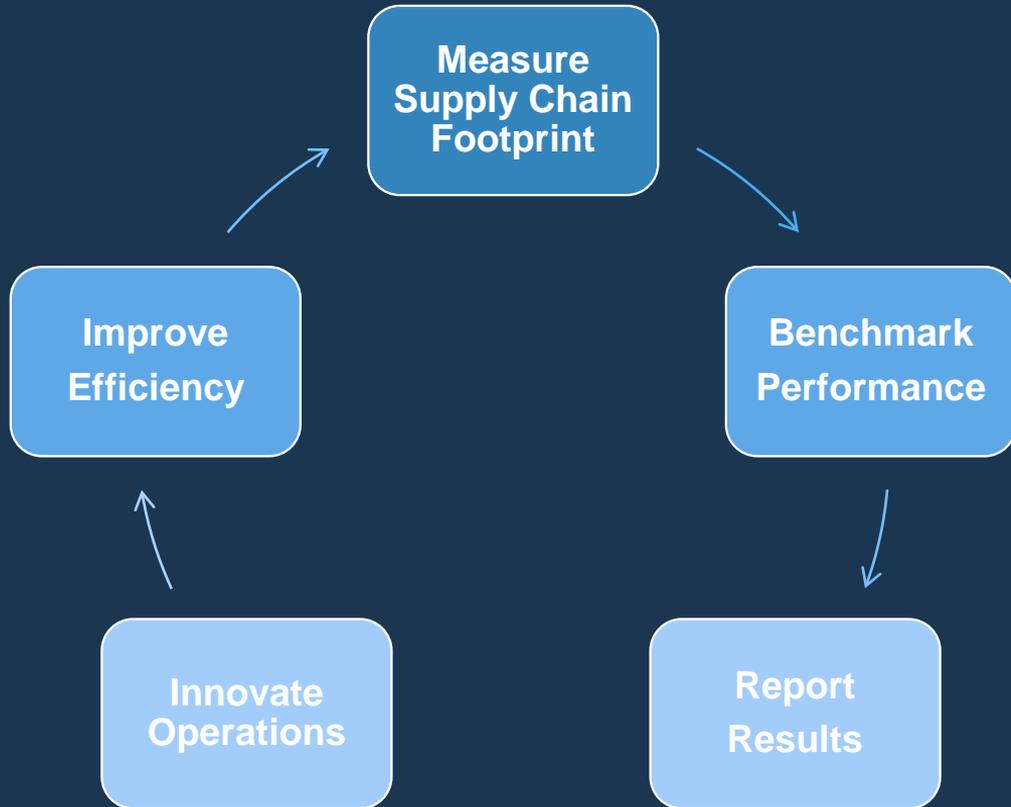
Modal Shifts



PART THREE

Using SmartWay to Add Freight Efficiency Into Your Sustainability Plans...Even If You're Not An Expert On Transportation

How to Address Supply Chain Carbon



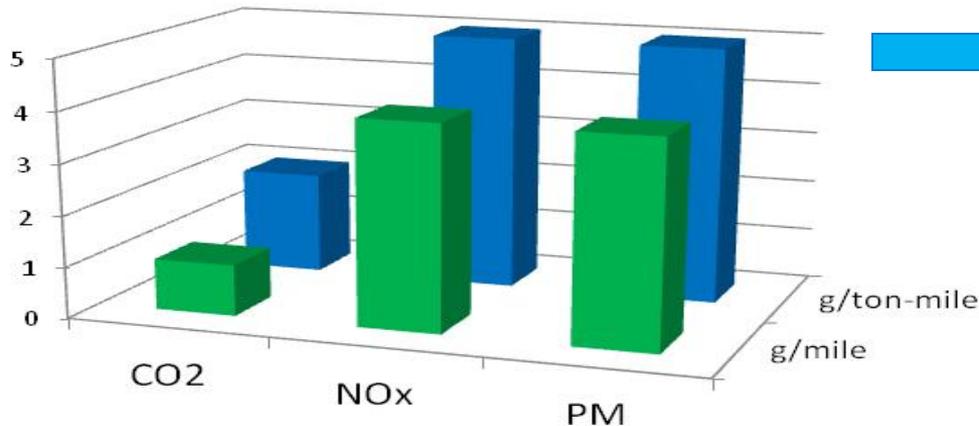
SmartWay Carrier Benchmarking

15 Carrier Categories

- TL, LTL, Refrigerated, Tanker, etc.

6 Emission Factors

- 2 metrics x 3 pollutants



Quintile Rankings

(ex: Truckload CO₂ g/mile)

Top 20% TL Dry Vans
600-1600 g/mile

• 1550 g/mile

Second 20% TL Dry Vans
1600-1700 g/mile

• 1650 g/mile

Middle 20% TL Dry Vans
1700-1800 g/mile

• 1750 g/mile

Fourth 20% TL Dry Vans
1800-1900 g/mile

• 1850 g/mile

Bottom 20% TL Dry Vans
1900-3600 g/mile

• 1950 g/mile

SmartWay for Carbon Reporting

Step 1 - Complete the Shipper Tool



The screenshot shows the 'SmartWay Introduction' window for the 'Shipper' tool. The title bar reads 'SmartWay Introduction' and 'Shipper'. The main content area includes an introduction paragraph, a link to the 'SmartWay Shipper Tool Website', and contact information for the SmartWay Helpline. Below this is a 'Tool Help and Navigation' section with several buttons: HELP, ADD/VIEW COMMENTS, VALIDATE SCREEN, ZOOM IN, PRINT SCREEN, and a question mark icon. At the bottom, there are 'ZOOM IN' and 'NEXT' buttons.



Step 2 - Generate SmartWay Data Reports



EMISSIONS SUMMARY
Partner Name: ABC Shipper
Company Name: ABC Shipper

Mode	CO2 g/Mile	CO2 g/Ton-Mile	CO2 Mass Emissions (Tons/Year)
Rail	1,163	20	111,333
Truck	2,044	285	62,722
Multi-modal	1,200	50	2,756
Logistics	2,300	500	41,337
Composite Total*	1,212	37	218,147



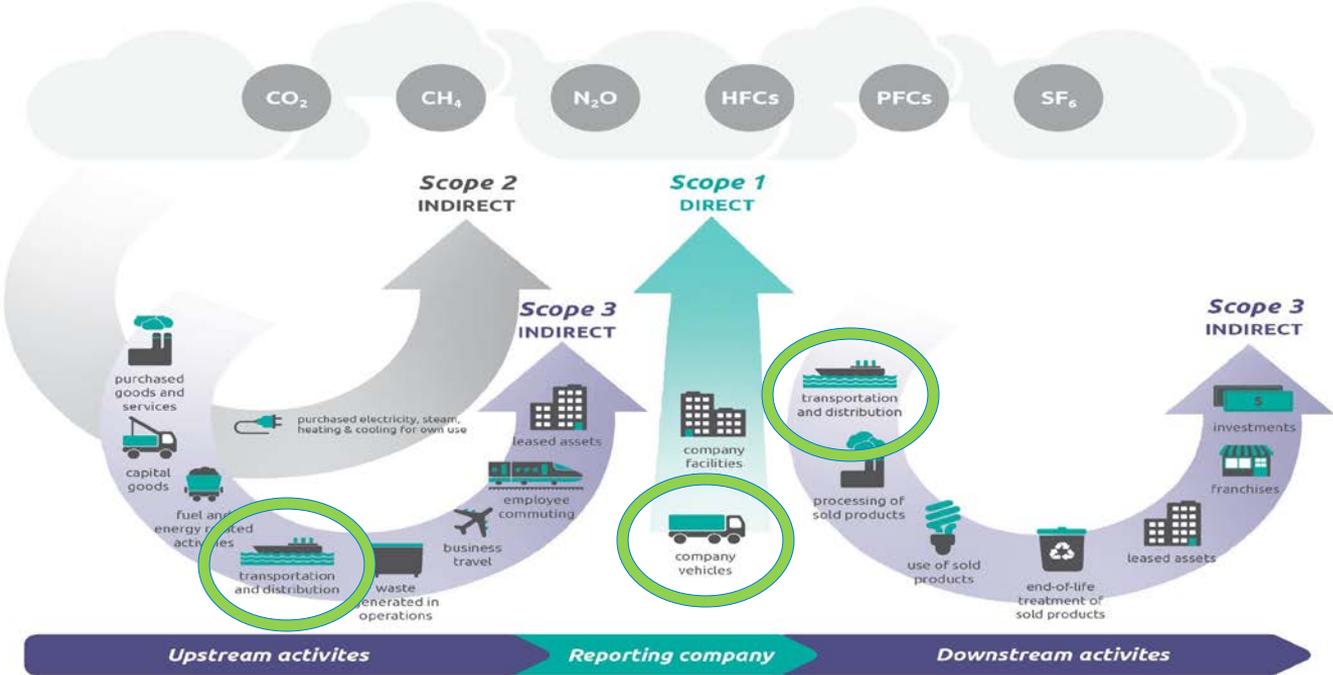
Step 3 - Use results in:

- Benchmarking and Operations
- Environmental Reporting
- Carbon Disclosure Submittals
- Shareholder Response



SmartWay used for Scope 3 Reporting

Figure [1.1] Overview of GHG Protocol scopes and emissions across the value chain



SmartWay for Carbon Optimization

Step 1- Complete Shipper Strategies analysis

SmartWay Shipper Tool: ABC Shipper

Select Carrier(s) | Emissions or % Smartway | Activity Data | % SmartWay | Emissions Summary | Carrier Performance

INPUTS ON THIS SCREEN ARE OPTIONAL - NOT REQUIRED FOR EPA SUBMITTAL.
 Previously in this tool, you calculated the emissions resulting from your movement of freight using various carriers. On this screen, you enter your company's strategies to reduce emissions BEFORE freight is placed on transport. All strategies on this screen are based on eliminating other words, this tab calculates the emissions that would have happened had you NOT implemented your efficiency improvements. Emissions results are calculated assuming a rough estimate of emissions impacts. SmartWay intends to improve the functionality of this tab in future tool.

Add Activity
 Select a category: Miles removed from system
 Pick an activity: Add Activity

Use the link below documentation of [Basic Quantities](#)

#	Name of Activity	Carrier Mode	Percent Improvement	Results (Tons/Year)			
				CO2	NOx	PM 10	PM 2.5
1.	cube optimization	Rail	5	5,860	123.9	3.48	3.48
	cube optimization	Truck	8	5,454	35.5	1.73	1.69
	cube optimization	Multi-Modal	5	145	1.5	0.08	0.08
	Miles removed from system	Logistics	4	1,722	9.9	0.57	0.57
2.	Package weight reduction	Rail	1	1,125	23.8	0.67	0.67
	Package weight reduction	Truck	15	11,069	72.1	3.52	3.42
	Package weight reduction	Multi-Modal	7	207	2.1	0.11	0.11
	Weight removed from system	Logistics	4	1,722	9.9	0.57	0.57
Total Results (Tons/Year)				27,304	278.6	10.74	10.59



Step 2 - Generate SmartWay Data Reports



SHIPPER STRATEGIES
 Partner Name: ABC Shipper
 Company Name: ABC Shipper

Activity Category	Activity Name	Mode	Improvement	CO2
Miles removed from system	cube optimization	Rail	5%	5,860
		Truck	8%	5,454
		Multi-modal	5%	145
		Logistics	4%	1,722
Weight removed from system	Packaging weight savings	Rail	1%	1,125
		Truck	15%	11,069
		Multi-modal	7%	207
		Logistics	4%	1,722
Total Results (Tons/Year)				27,304



Step 3 - Use results in:

- Performance tracking
- Progress reporting
- Case Studies



Working to Build a Better World

KRAFT FOODS RESPONSIBILITY REPORT



Report your Corporate Citizenship

KRAFT FOODS RESPONSIBILITY REPORT

← 22 →

SUSTAINABILITY

HUNGER AND AFFORDABLE NUTRITION

HEALTH AND WELL-BEING

FOOD SAFETY AND QUALITY

WORKPLACE AND CULTURE

COMPLIANCE AND INTEGRITY

CORPORATE GOVERNANCE



TRANSPORTATION/
DISTRIBUTION

BETTER WORLD SNAPSHOT

As members of the U.S. Environmental Protection Agency's **SmartWay[®] Transport Partnership**, we've reduced truck idling, lowered our corporate speed limit, equipped our trucks with fuel-saving technology and adopted other strategies that enable our trucking operations and those of our freight carriers to use less fuel and emit fewer greenhouse gases. In 2009, we were one of just five consumer products companies to earn the SmartWay Excellence Award.



Shipping and storing product more efficiently

Improving our global transportation and distribution network so that we move products and raw materials more efficiently saves truck fuel, cuts carbon dioxide emissions and reduces traffic. Since 2005, improved internal processes along with our collaborations with customers and suppliers have saved more than 50 million road miles (80 million kilometers)—the equivalent of driving from Madrid to Beijing more than 8,500 times.

Sometimes the answer is right under our feet. Like our underground refrigerated-storage facility built into the natural limestone caves at Springfield, Missouri, U.S. Not only do the naturally cool caves require 65 percent less energy than conventional storage facilities, their large size and central location enable us to consolidate inventory and transport our products to our customers more efficiently. Annual savings: 180,000 gallons (680,000 liters) of fuel, 4 million pounds (1,800 metric tons) of carbon dioxide emissions, and more than 1 million miles (1.6 million kilometers) of truck travel.

Another solution is to use other, more efficient modes of transportation. In North America, we've saved more than 1 million miles, replaced

10,000 truck shipments and cut nearly 2,000 metric tons (4 million pounds) of emissions by shipping wheat to our Toledo, Ohio, flour mill by waterway rather than road. In Brazil, in just six months of shipping by water we reduced 125 truck shipments—nearly 250,000 miles (390,000 kilometers) and 300 metric tons (more than 600,000 pounds) of carbon dioxide emissions.

The right technology can make a difference, too. Using the **Oracle[®] Transportation Management** system to manage and optimize truck movements and minimize "empty miles" in our U.S. operations saved us more than 500,000 miles (800,000 kilometers) in 2009.

BETTER WORLD SNAPSHOT

Since 1993, we've shipped coffee beans to our Berlin, Germany, roasting plant by rail rather than truck. That's reduced fuel consumption by 60 percent, eliminated 100,000 truck transports, cut 1.8 million miles (2.8 million kilometers) and eliminated carbon dioxide emissions by two-thirds, or 2,300 tons (2,000 metric tons).

KRAFT FOODS RESPONSIBILITY REPORT

SUSTAINABILITY

HUNGER AND AFFORDABLE NUTRITION

HEALTH AND WELL-BEING

FOOD SAFETY AND QUALITY

WORKPLACE AND CULTURE

COMPLIANCE AND INTEGRITY

MAKING SUSTAINABILITY A WAY OF DOING BUSINESS

Sustainability is at the present without of future generatio It's about conduct is environmentally, responsible. It's at mindful of tomorr

As a food compar on the earth for th day to make qualif And we need to d earth's resources i

The demands ber are growing. Expe population is goin 2050. And stands in much of the de- incremental strain areas, experts find are being depletes replenish them. CI are becoming mor

Change is necess a role to play. We i conduct our busin indirectly to becom

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

United Nations-sponsored Brundtland Commission Report

PART FOUR

**Over 3000 Companies Move
Freight the SmartWay...
Why Should You?**

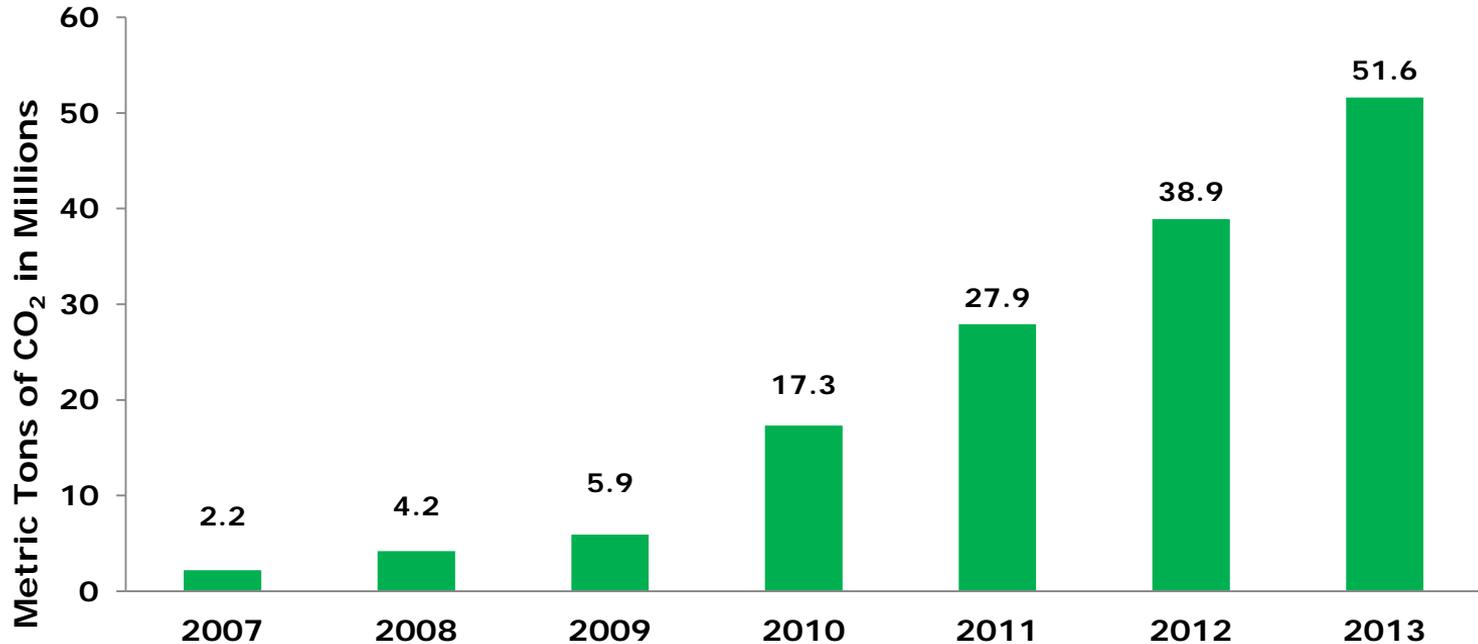
SmartWay Snapshot

- Since 2004, SmartWay has grown to about 3,000 partners with broad freight industry support in U.S. and Canada
 - Fortune 500 shippers from key economic sectors
 - Top 100 U.S. truck carriers
 - All Class 1 rail lines
 - Major logistics firms
- Since 2004, SmartWay Partners saved:
 - 51 million metric tons of CO₂ (+ significant NOx & PM savings)
 - 120 million barrels of oil and 5 billion gallons of fuel
 - \$16.8 billion dollars in fuel costs
- *Equivalent to taking 10 million cars off the road for one year*



SmartWay Partner CO₂ Savings

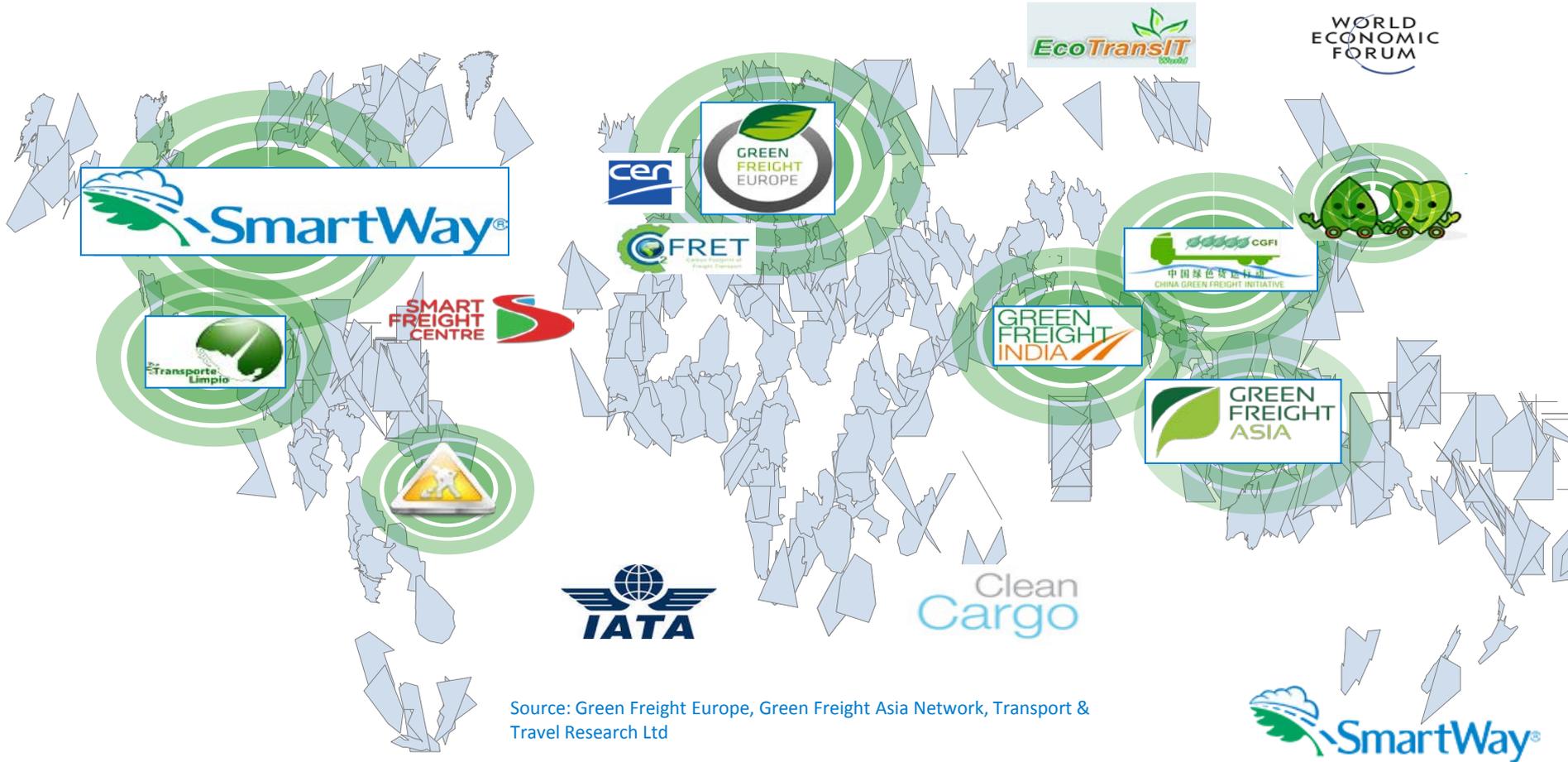
2007 to 2013 Performance Trends



SmartWay Provides A Balanced Approach

- *Simplicity* – standard benchmarking tools and methods
- *Accuracy* – performance based assessment of CO₂, NO_x, PM
- *Flexibility* – multiple metrics, multimodal, multi-fleet, multi-categories
- *Transparency* – manageable granularity, protects sensitive info

Status of Global Green Freight Efforts



Source: Green Freight Europe, Green Freight Asia Network, Transport & Travel Research Ltd

PART FIVE

Why SmartWay Might Make Getting Support Easier than You Think



SmartWay Helps You Cut Out Inefficiencies That Cost Your Company Money

Raise The Bar On Freight Sustainability!

Hire the top SmartWay carriers and use our tracking reports for results like these!



Retail industry: the top 50% of carriers emit 98 g CO₂/ton-mile.*

*weighted average

Using more non-SmartWay carriers to haul your freight gives you results like these.



Retail industry: the bottom 50% of carriers emit 192 g CO₂/ton-mile.*
That's almost twice (1.96 times) as much as the top 50% of carriers.



SIDE NOTE

You get EPA support,
tools, and guidance.

And...there's no cost to
participate

Why Should Your Company Join SmartWay?

- Standardized approach to assess supply chain efficiency and emissions
 - For any business that ships, carries or receives goods
 - Adopted by industry leading corporations
- Designed with and for the freight sector
 - Delivers solutions to marketplace needs and challenges
 - Voluntary and no-cost
- Proven marketing benefits
 - Shippers identify greener carriers
 - Carriers gain competitive advantage for leading shippers
- Credible, neutral data oversight
 - EPA oversees data quality assurance and control
- Strengthens brand equity to investors, customers
 - Carbon assessment, corporate responsibility





QUESTIONS

For more information:

www.epa.gov/smartway

smartway_transport@epa.gov

SmartWay Helpline

734-214-4767

THANK YOU!