

SmartWay

Vision

2020

... a USEPA SmartWay webinar

June 24, 2015

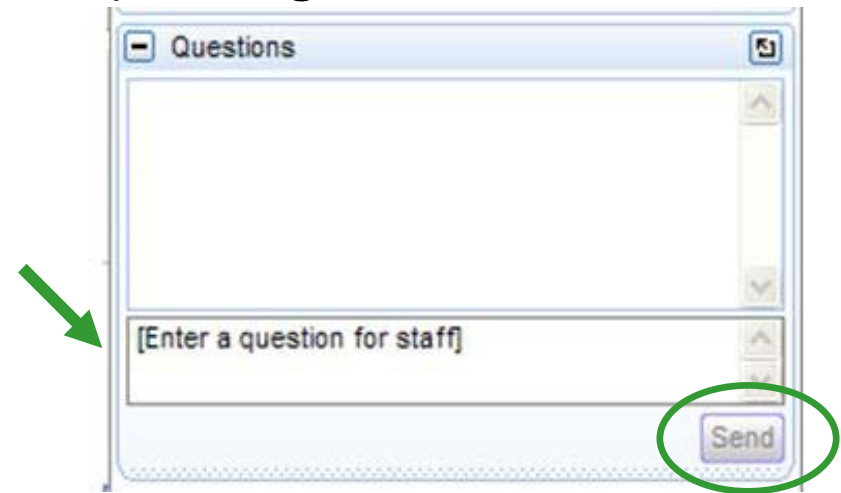
2-3 pm (ET)

*Moving Freight Transport forward to a
New Era of Sustainability*



Webinar Logistics

- Presentation slides and a **recording** of this webinar will be available to download within 1 week at:
<http://www.epa.gov/smartway/webinars.htm>
- Attendees will be in listen-only mode (muted) throughout today's webinar.
- During the webinar, submit a question by typing into the **Enter a question for staff** box and clicking the **Send** button. Staff will read and answer these questions as time allows.
- Please complete the **survey** questions at the end of the webinar. Your feedback is important to us!



Our Panelists



Matthew Payne
Environmental Engineer



Buddy Polovick
SmartWay International
Program



Joann Jackson-Stephens
SmartWay Brand Manager



Denise Kearns
Environmental Protection
Specialist
MODERATOR

Webinar Agenda

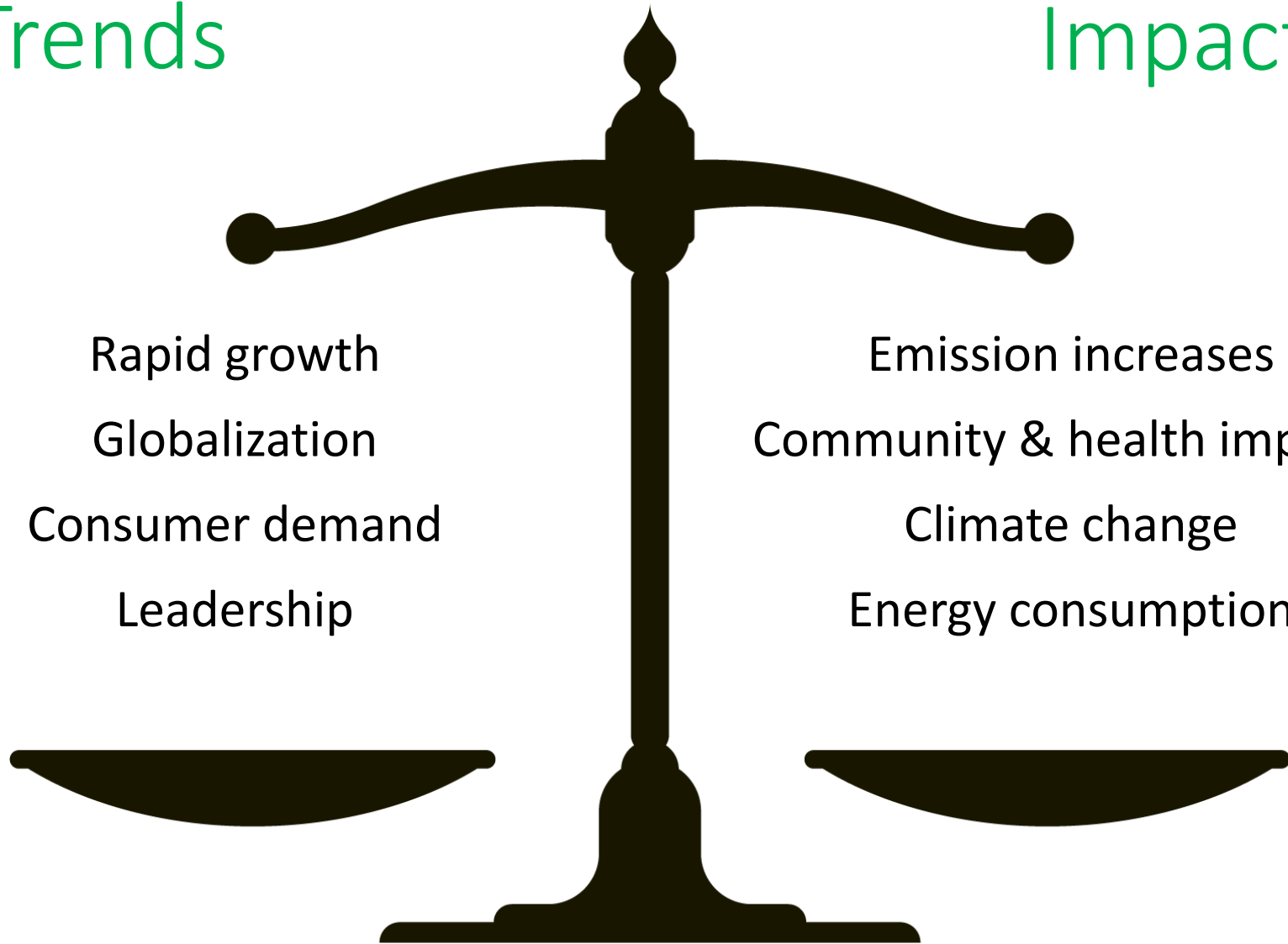


- Freight trends, environmental impacts
- SmartWay 2020 goals
- Address the entire freight supply chain
- Build a global green freight movement
- Leverage SmartWay brand to recognize green freight leadership
- Support technology & operational innovations, information exchange

Questions & Answers

Freight Trends

Environmental Impacts



Poll question



EPA Approach

Regulatory

- Heavy Duty GHG Phase 1
- Heavy Duty GHG Phase 2

Clean Diesel Campaign

- Grants
- Clean Diesel Projects



SmartWay Background

- EPA and freight stakeholders launch SmartWay
- Ten-year anniversary
- Federal advisory committee and partner recommendations
- SmartWay Vision 2020

Complete Transportation Supply Chain

- Add air and ocean-going vessel transportation
SmartWay assessment capability



SmartWay
Today

Air & Marine

Complete
Freight footprint

Air and Marine Assessment Capability



Air tool complement

- ✓ Partner and peer review
- ✓ Beta testing
- ✓ Integrate data already reported to Federal Aviation Administration

Ocean Freight

- ✓ Stakeholder collaboration
- ✓ Identify opportunities for reciprocity
- ✓ EPA Port Initiative

SmartWay is an Integrated System

- Carrier Data Collection Tools
 - Truck, Logistics, Barge, Rail, Multimodal Suite
 - **Beta Air Tool in 2015**
- SmartWay “Process”
 - Data collection, processing, QA/QC, benchmarking
 - Produces 6 emission factors for public use
- SmartWay Database
 - Stores and manages all SmartWay data
 - Allows industry benchmarking
- SmartWay Website
 - Contains downloadable versions of all tools, user guides, technical documentation, webinars, program descriptions
- Shipper Tool
 - Calculates carrier emission footprints for Shippers

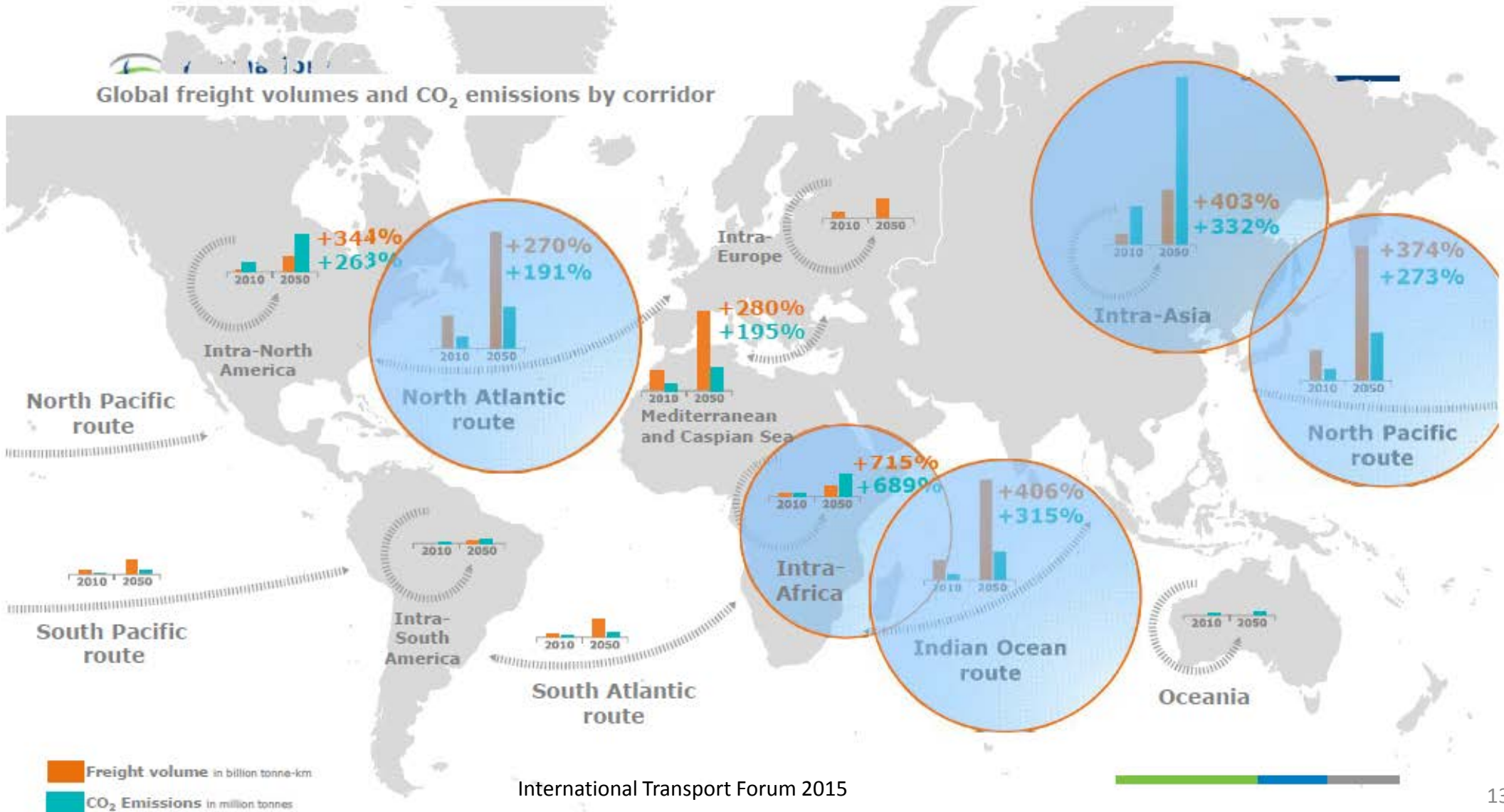


One-Stop Shop for Freight Emissions Data



- Provide complete, reliable data on all freight activity in supply chain
- Raise awareness of how freight efficiency improves supply chain performance
- Common freight metric available for global carbon accounting
- Meet needs of increasingly global goods movement system

Global Goods Movement – Growth Projections

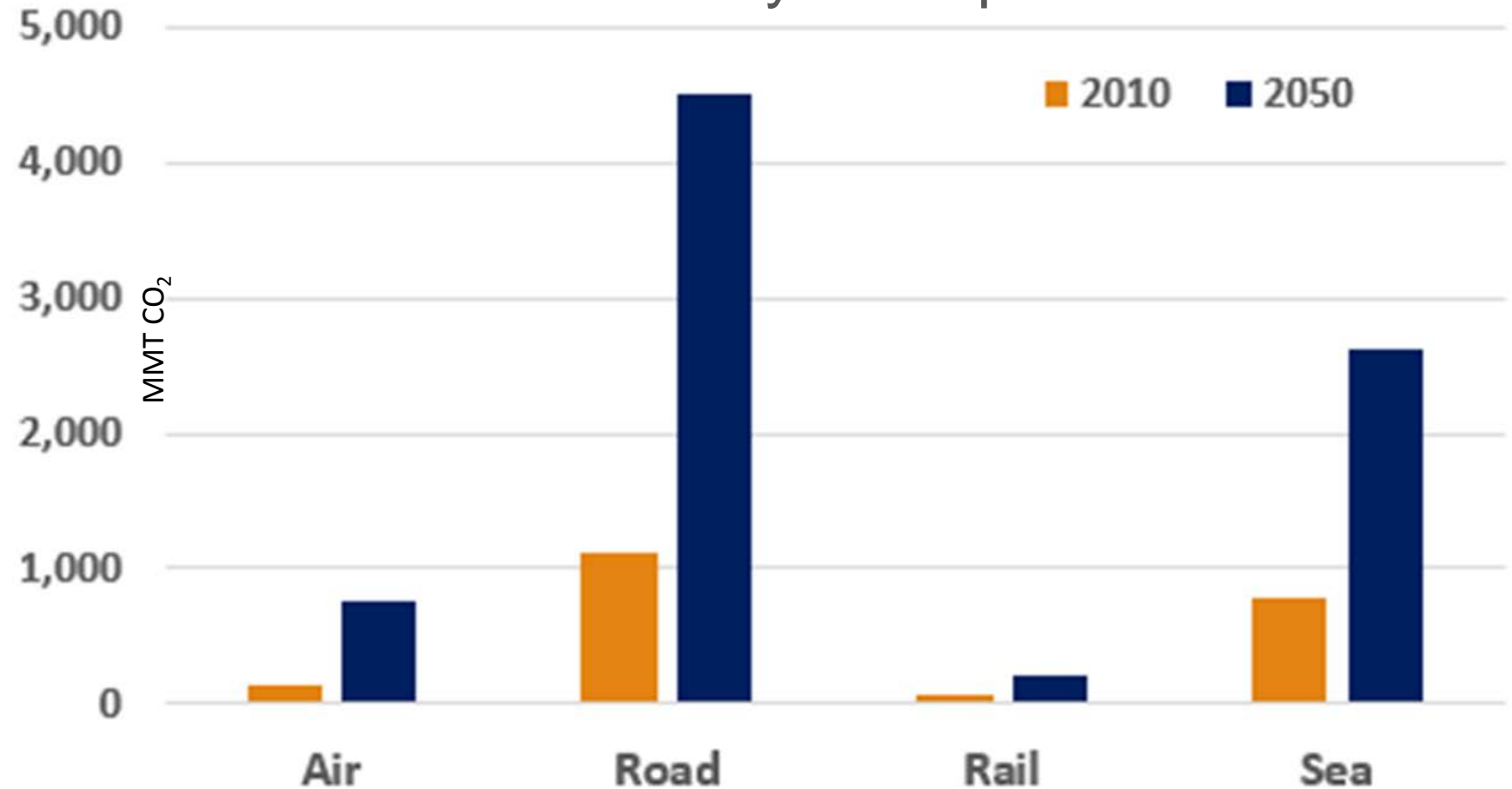


Global Growth in Freight CO₂ Emissions



Goods movement
Is fastest growing
source of transport
emissions - calling
for global solutions
to encourage greener
freight transportation

Global Growth by Transport Mode



International Transport Forum 2015

Green Freight Goes Global



SmartWay in North America

Canada adopted SmartWay in 2012

- Fully integrated seamless program
- Administered by Natural Resources Canada
- Metric and French tools
- Joint Smart Driver online curriculum



Mexico operating Transporte Limpio since 2010

- Modeled on SW 1.0



- Commission for Environmental Cooperation issued report recommending aligning North American freight efforts



- EPA and NRCan working to further develop options for SmartWay in Mexico

Mexico can set stage for Latin American efforts

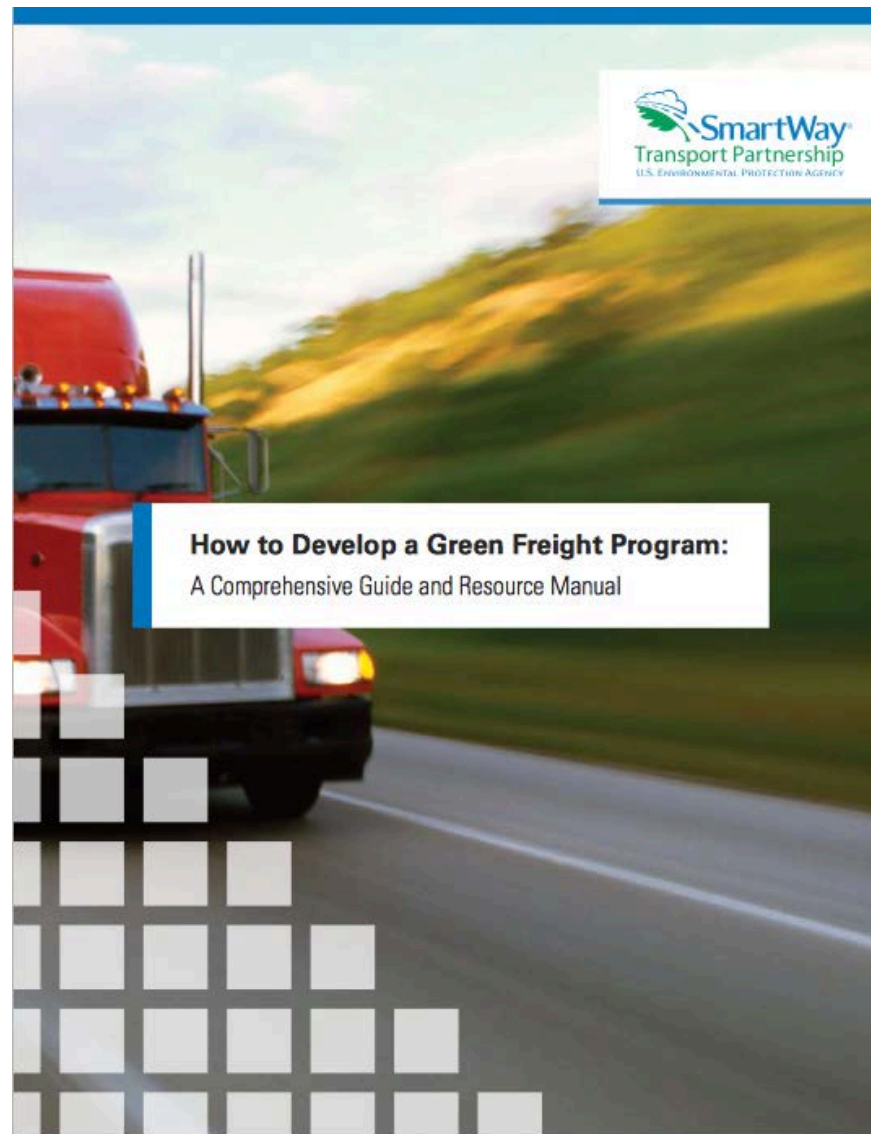
- Brazil, Argentina, Chile, Columbia



SmartWay Replication Globally



- SmartWay leading way in the Global Green Freight movement
- Building capacity for other countries to design Green Freight programs
- Published guide for countries “How to Develop a Green Freight Program”
- Mandarin, Spanish, Portuguese, French version available
- Conduct trainings and share expertise in countries such as China and Mexico
- Develop tools for freight emissions accounting that can be adapted for other regions

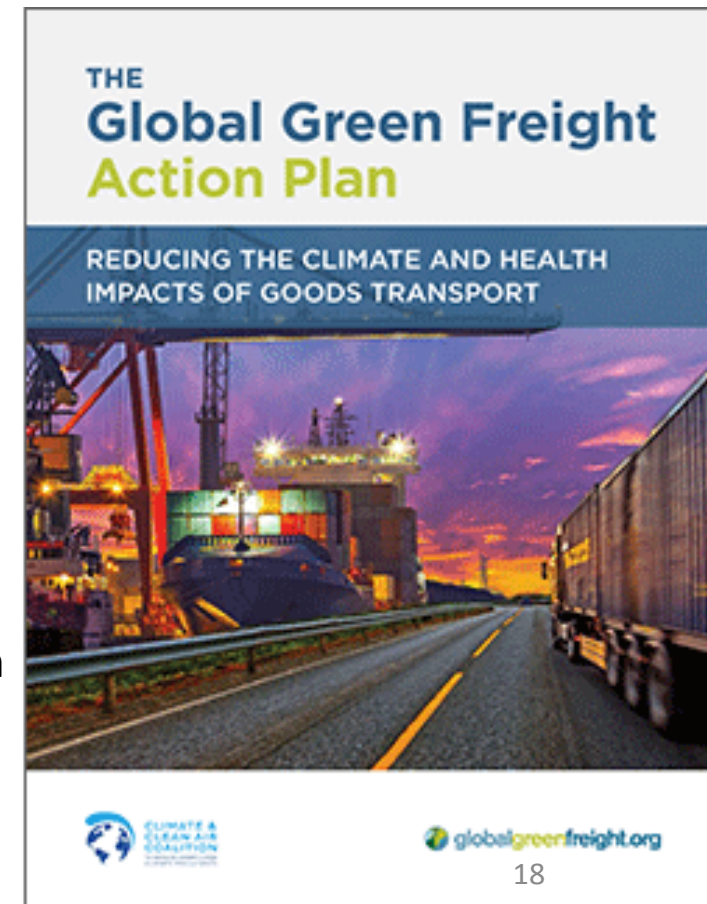


SmartWay Global Collaboration

EPA engaged through bilateral & multi-lateral mechanisms to work with other nations



- China - *Climate Change Working Group*
 - China Green Freight Initiative
- Multilateral collaboration in Brazil
- UNEP - *Climate and Clean Air Coalition*
Global Green Freight Action Plan
 1. *Align/Enhance Existing Green Freight Efforts*
 2. *Develop/Support New Green Freight Programs*
 3. *Address Black Carbon in Green Freight Programs*
- *Global Logistics Emissions Council*
 - Creating global framework for freight supply chain logistics emissions methodologies



Green Freight Leadership via



- SmartWay brand essential program element
- Symbol of green freight leadership
- SmartWay awards program
- Partner profiles
- Case studies



Leverage SmartWay Brand



Business-to-Business

Consumers



 **UPS** @UPS 23 Oct
Congrats! MT @MenloLogistics: **Menlo** honored w/@EPA **SmartWay** Excellence Award for ldrshp in #supplychain efficiency
ow.ly/q6c5P

Expand

 **Menlo Logistics** @Me
Menlo honored with tr for its leadership in sup

Expand



Sample Uses of Partner Logo: Websites



Sample Uses of Partner Logo: Advertising



RUAN

Overview

 **Steven G. Chapman**
President and CEO

Company

- Founded in 1932
- 230 locations nationwide
- 5,100 team members

Core Services

- Dedicated Contract Carriage
- Integrated Solutions
 - Logistics management
 - Load management
 - Mode selection
 - Carrier management
 - Freight pay and audit
 - Certified brokerage services
 - Cross-docking/Postponement
 - Warehousing/Warehouse management
 - Subassembly
- Bulk Carriage

Megasafe 

“The Business of America is Business.” — Calvin Coolidge
The Business of Alliance Shippers Inc. is... “To Manage Our Customers’ Business.”®

The Perfect Shipment®
Our Commitment To You.

Perfect Shipment® Performance¹		
On-Time Pick-Up = 99.0%	On-Time Delivery = 97.9%	YTD On-Time Delivery = 97.9%
Damage-Free Performance²		
Refrigerated Services = 99.49%	Dry Van Intermodal and Highway Services = 99.65%	

ALLIANCEshippers inc. For more information about all of our services, visit us at: www.alliance.com

 **SmartWay**
Transport Partner
Getting There With Clean Air


¹Data as of 1/31/13 ²Fiscal Year 2011-2012 © denotes a registered trademark of Alliance Shippers Inc.

Partner with

PENSKE

Fleet choices today are complex. You need an expert partner like Penske to help you evaluate transportation options that really help your business and the environment.

888-234-4201

 **SmartWay**
Proud Supporter of

Sample Uses of Partner Logo: Reports



Sustainability

Since 2010, we have:^{*}

- Increased sustainable sourcing. **36%** ↑
- Cut packaging. **20,500 metric tons (45 million pounds)**

And reduced energy, greenhouse gas emissions, water and waste by:^{*}

- Our 2015 goal **15%**

* Measured against total production.

Creating a more delicious world

Partnerships
EPA ENERGY STAR[®], EPA Green Power Partnership, EPA SmartWay Shipper, Business for Social Responsibility, EPA WasteWise, U.S. Green Building Council Member, Sustainable Apparel Coalition

Emission R

2010 Goal
To achieve net zero emissions

2010 Status
Net zero emissions achieved

Program Description
Kohl's recognizes that human activity is the primary source of the environment comes from...

Carbon Emissions Management
Kohl's annually measures its carbon footprint associated with operations and transportation of merchandise. Disclosure Project. Beginning in 2010, Kohl's joined the EPA SmartWay Shipper program and was recognized in 2008 and 2009 with the SmartWay Shipper Excellence Award for achievements in efficient shipping of merchandise. In 2010, nine of our top 10 carriers had the highest rating of 1.25 in the EPA SmartWay program, a program that stresses fuel efficiency and carbon-reduction strategies. In total, Kohl's achieved a 1.19 out of 1.25 rating for miles traveled in 2010 on EPA SmartWay-rated carriers.

Kohl's Carbon Footprint

Year	Scope 1		Scope 2		Square Foot Building Space	Normalized Emissions Per 1000 Sq. Feet	Normalized Emissions Per 1000 Sq. Feet	Emission Reductions	
	Direct	Indirect	Travel	Transportation				Renewable Energy Credits	Reductions/Carbon Offsets
2007	22,314	749,643	5,851	238,425	94,495	842	8.23	63,548	-
2008	24,923	810,358	5,013	182,154	101,586	1019	8.27	184,300	-
2009	28,003	833,834	5,026	208,101	107,430	1059	8.07	664,931	-
2010	27,062	832,519	6,369	220,533	109,036	1089	7.94	1,064,131	33,000

In 2010 Kohl's decreased its normalized emissions by 1.6% while opening an additional 30 stores and an Ecommerce Fulfillment Center.

Emissions Reductions

Emissions Generated		2009	2010
Direct Emissions	28,003	27,062	
Indirect Emissions	833,834	832,519	
Travel Emissions	5,026	6,369	
Total Emissions	866,863	865,950	

Emission Reductions		2009	2010
Renewable Energy Credits	664,931	1,064,131	
Carbon Offsets	-	-	33,000
Total Offsets	664,931	1,007,131	
Net Carbon Emissions	201,932	(231,181)	

Transportation Program

In 2010, Kohl's executed 17,456 backhaul trips to our distribution centers from our vendors on return trips to stores. This eliminated 4,151,549 empty miles. These once-empty trailers now carry merchandise from our vendors, ultimately reducing the number of inbound transportation trips. Kohl's also uses rail transportation for 54% of all inbound transportation since rail uses less fuel and causes fewer emissions than truck services.

Maintaining Air Quality and Managing Greenhouse Gas Emissions
The primary air emissions managed by Tyson Foods operations include:

- Particulate matter, particulate matter of 2.5 micrometers or smaller, and particulate matter of 10 micrometers or smaller (PM 10) from operations such as feed milling and cooking.
- Sulfur oxides, nitrogen dioxide, carbon monoxide, and PM10 emissions from the combustion of fossil fuels; and
- Volatile organic carbon emissions that may result from fryer operations.

In the United States, air emissions are regulated by various federal, state, and local environmental agencies. Our compliance with these regulations is verified through annual emissions inventories, annual and semi-annual emission compliance certifications, sampling, periodic state agency audits, and internal compliance monitoring systems.

Our air emissions management approach also includes the implementation of pollution prevention programs, the installation of pollution control equipment, and investment in air emission control technologies, as needed. We have completed a potential-to-emit inventory for our U.S.-based operations as a component of the ongoing process of managing air permits and operational changes.

Tyson Foods completed its corporate-wide GHG inventory in accordance with the Climate Leaders Greenhouse Gas Inventory Protocol. This inventory includes GHG emissions from our U.S. chicken, beef, pork, and prepared foods operations as well as our hog buying stations and transportation operations. Additionally, it includes information from our U.S. based Cobb-Vantress and Pirtek Group subsidiaries. It does not include information from our independent poultry producers.

Our GHG footprint during calendar year 2004 was 5.35 million metric tons. This baseline inventory includes data related to facility fuel and electricity usage, transportation fuels, refrigeration usage, and anaerobic biogas production. Based on the inventory, the company is evaluating its energy profile and considering a process for establishing energy metrics tied to GHG emissions. We believe any approach selected must provide a consistent framework for measurement to align with future regulatory and policy expectations related to carbon management. In light of the current uncertainty surrounding the legislative and scientific discussions related to climate change, however, we may choose to delay our decision on goal setting in order to better understand the future legal landscape and role of carbon in the economy as well as its potential financial implications on our company.

GREEN HOUSE GAS EMISSION SOURCE COMPARISON

ABSOLUTE EMISSIONS BY MILLION METRIC TONS PER YEAR

All values are rounded to first significant digit. Emissions may not always precisely total due to rounding.

We also became a partner in the EPA SmartWay[®] Transport Partnership in 2004. The SmartWay partnership is a voluntary environmental and energy conservation program for companies that ship and haul freight. In 2006, we expanded our involvement in this program, and gained national status and recognition from the EPA as an authorized shipper/carrier partner. At the time this status was achieved, we were one of only seven companies to be recognized as both a shipper and carrier partner.

On October 4, 2012, the U.S. Environmental Protection Agency's (EPA) SmartWay Transport Partnership shined a spotlight on Tyson Foods for its efforts to reduce emissions and overall truck miles. As part of its participation of the program, Tyson Foods' Team Members eliminated more than 145 million over-the-road truck miles during fiscal years 2011 and 2012. The SmartWay partnership noted Tyson Foods' work to purchase lightweight equipment, its innovative package design, use of railway shipping and logistics as successful improvements.

Approximately 66 percent of Tyson Foods' refrigerated shipments are transported by SmartWay Carriers. In addition, below are recent initiatives designed and implemented by Tyson Foods to reduce the company's environmental impact and improve its overall sustainability.

Transport Efficiencies

In 2012, we continued our involvement in the U.S. Environmental Protection Agency's SmartWay Transportation Partnership. Through it, we are reducing carbon dioxide emissions and saving fuel with the active participation of our logistics team and supply chain. Kimberly-Clark has adopted several programs that are increasing intermodal usage and reducing length of haul, total miles and empty miles, as well as wait time and idling at shipping and receiving docks.


Getting There With Cleaner Air

2008	2009	2010	2011	2012
7,499	64,565	78,502	87,934	91,353
0.14	0.12	0.22	0.12	0.04
76.5	88.9	109.4	117.8	119.6
42.7	32.4	44.2	55.8	60.3
6.4	7.4	9.1	9.8	10.0
12.7	14.8	18.2	19.6	19.9
6.4	7.4	9.1	9.8	10.0
143.1	166.2	204.7	220.4	223.8
386.2	332.5	409.4	440.9	447.7
143.1	166.2	204.7	220.4	223.8

are estimates.
savings for 2009 is due to a significant drop in fuel prices.
carbon dioxide emitted for each gallon of diesel fuel burned: 22.45.
6, we have more than doubled intermodal utilization, from 16% in 2006 to 36% in 2011. This increase resulted in approximately 42,000 loads to more than 91,000 loads, a 117 percent increase in intermodal utilization.
of 53 million gallons of diesel fuel.
of CO₂ emissions by more than 540,000 tons.
ative saving (CS) equal to \$294 million as compared to usage of over-the-road trucks.

Sample Uses of Partner Logo: Varied



Linde Gas | *Linde* **BULK TRIP REPORT** 

24-HOUR TRANSPORTATION EMERGENCY CONTACT
CHEMTREC 1-800-424-9300
OR 1-202-483-7616

REPORT NO.: _____ DATE: _____

DRIVER DATA			LOG HOURS			
#	CLOCK NO.	NAME		DAY 1	DAY 2	DAY 3
1			ON-DUTY DRIVING (PAID)			
2			ON-DUTY NON-DRIVING (PAID)			
			OFF DUTY PAID			
TRACTOR NO.: _____			TOTAL PAID HOURS			
TRAILER OUT: _____			LUNCH/OVER NOT-PAID			
TRAILER IN: _____			TOTAL TRIP HOURS			

PRODUCT: Check One

HAZARDOUS MATERIAL INFORMATION

Circle One:
One Cargo Tank or One Tube Trailer

_____ UN 1951, ARGON, REFRIGERATED LIQUID	2.2 NONFLAMMABLE GAS	_____ SCF
_____ UN 1977, NITROGEN, REFRIGERATED LIQUID	2.2 NONFLAMMABLE GAS	_____ SCF
_____ UN 1079, OXYGEN, REFRIGERATED LIQUID	2.2 (5.1) NONFLAMMABLE GAS	_____ SCF
_____ UN 2187, CARBON DIOXIDE, REFRIGERATED LIQUID	2.2 NONFLAMMABLE GAS	_____ LBS.
_____ UN 1049, HYDROGEN, COMPRESSED	2.1 FLAMMABLE GAS	_____ SCF
_____ UN 1046, HELIUM, COMPRESSED	2.2 NONFLAMMABLE GAS	_____ SCF
_____ UN 1066, NITROGEN, COMPRESSED	2.2 NONFLAMMABLE GAS	_____ SCF

CANADA SHIPMENTS: NET QUANTITY MUST BE ACCURATE AT ALL TIMES

LOAD WEIGHTS:	BEFORE TRIP:	AFTER TRIP:	DELIVERED:
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TRIP INFORMATION										
SEQ. #	TANK ID#	CUSTOMER NAME	ORDER NUMBER	TIME IN	TIME OUT	INCHES START	FINISH	UM	QTY.	

SPECIAL INSTRUCTIONS: _____

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Center for Information and Exchange on Green Freight Movement

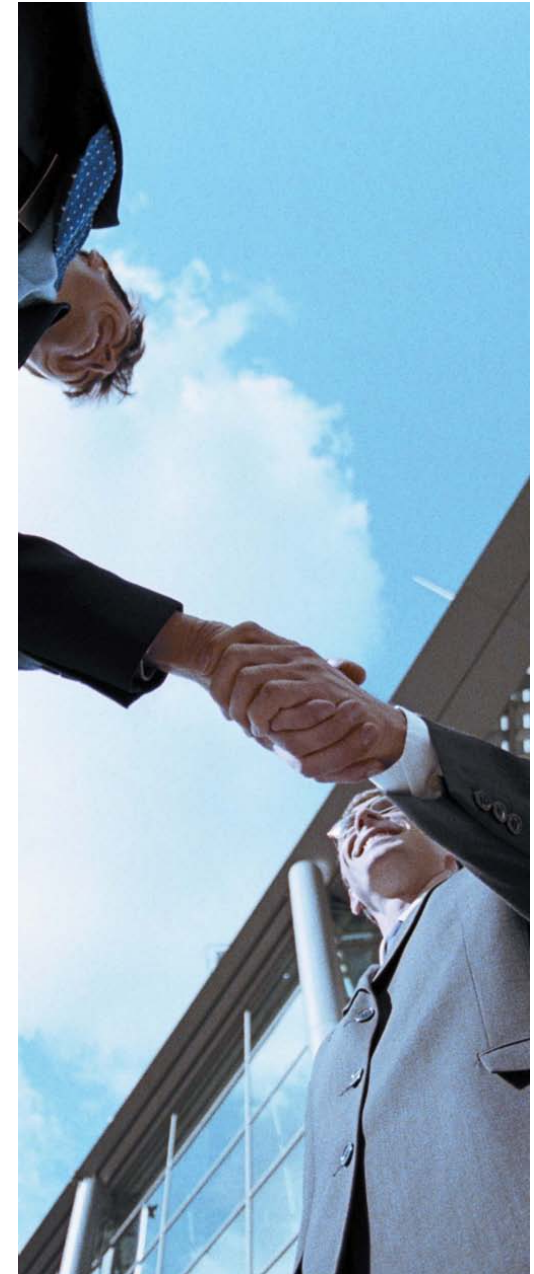


- Build on SmartWay technology program
- Advance technologies and innovative practices
- Establish testing protocols & standards
- Share technology verification framework globally
- Reduce carbon emissions before clean benefits of regulation are available



Platform for shipper-supplier collaboration

- Encourage shipper engagement
- Showcase operational strategies
- Facilitate information exchange, share best practices
- Collaboration



SmartWay Vision 2020



- Catalyze change across entire freight supply chain
- Serve as global role model for other nations – including regions where extensive freight / GHG growth is projected
- Use SmartWay brand to identify green freight leadership
- Act as clearinghouse for information sharing and exchange on greener goods movement
- Impact freight transport GHG reductions today

SmartWay Helpline

smartway_transport@epa.gov

734-214-4767



www.epa.gov/smartway