Climate Collaborative Commitment Areas

- **Agriculture**: Integrate carbon farming into the agricultural supply chains
- **Energy Efficiency**: Increase energy efficiency
- **Food-Waste**: Reduce food-waste in the supply chain
- **Forests**: Remove commodity-driven deforestation from supply chains
- **Policy**: Responsible engagement in climate policy
- **Packaging**: Reduce the climate impact of packaging
- **Renewable Energy**: Commit to 100% renewable power
- **Climate Pollutants**: Reduce short-lived climate pollutant emissions
- **Transportation**: Reduce climate impacts of transportation
More companies are taking action to reverse climate change than ever before. They’re tackling this global challenge not only because it’s essential to the future of our planet but also because doing so offers tremendous opportunities for growth, job creation, and prosperity.

Companies can help reverse climate change by making a commitment to one or more of these initiatives.

**WHY TAKE ACTION?**

Climate change is both the greatest threat our planet has ever faced...
How many companies have committed?

317 Companies Committing to Action

1194 Commitments
THANK YOU TO OUR DONORS!

Alter Eco
Annie's
Associated Brands
Califia Farms
California Olive Ranch
Cheer Pack
Clif Bar & Company
Connective Impact
Danone North America
Decker and Jessica Rolph
Dr. Bronner’s
Elk Packaging
Foodstirs
Gaia Herbs
General Mills
Good Earth Natural Foods
GrandyOats
GreenSeed Contract Packaging
Guayaki
Happy Family
INFRA
KeHE
Kuli Kuli Foods
Lotus Foods
Lundberg Family Farms
MegaFood
Melt Organic
MOM’s Organic Market
Mountain Rose Herbs
National Co+op Grocers
Natural Habitats
Nature’s Path
New Hope Network
Numi
Nutiva
Oregon’s Wild Harvest
Organic India
Organic Valley
Outpost Natural Foods
Patagonia
Plum Organics
Pluot Consulting
Presence Marketing
Rebbl
Stahlbush Island Farms
Stonyfield
Straus Family Creamery
Studio Fab
Tacoma Park Silver
Spring Co-op
Traditional Medicinals
Trayak
Why Commit To Reducing The Climate Impact of Transportation?

Switching to alternative fuels and transitioning fleets from traditional gasoline and diesel-powered vehicles to hybrid and electric vehicles can reduce or eliminate greenhouse gas emissions from ground fleets.

Adopting efficiencies in shipping cargo, logistics optimization, and intermodal transport can significantly reduce greenhouse gas emissions from the global movement of goods while also providing significant savings.

120 Companies have made the Transportation Commitment!
Our Speaker

Moderator: Lisa Spicka
Associate Director
Sustainable Food Trade Association, SFTA

Francisco Dóñez
Ports/Marine and Rail Sector Lead,
West Collaborative
EPA
BUILDING SUSTAINABLE SUPPLY CHAINS

Francisco Dóñez, Ph.D.
US EPA Region 9
Los Angeles, CA
WHY FREIGHT MATTERS TO BUSINESS – U.S. SNAPSHOT

- Economic cornerstone
- Trucking, rail, water, air deliver goods and materials that drive economic growth and development
  - $17.9 trillion value
  - 20 B tons annually; 55 M tons daily
- Essential to competitiveness, jobs, economies
  - 10 M U.S. jobs related to freight activity
  - 8.6% of U.S. GDP ($1.4 trillion)
WHY FREIGHT MATTERS TO INDIVIDUAL COMPANIES

- Myth: Freight is not core to our business
- Reality: Freight is essential to the success of our core business
- Freight trends emerging now and over next few decades will have a major impact on our bottom line.
ENERGY IMPACTS

• Freight modes account for about 39% of total world transportation energy use.

• Experts project that global freight transport volumes will more than quadruple by 2050.
FREIGHT’S SHARE OF CARBON EMISSIONS IS GROWING

Percent Change in US CO₂ Emissions Compared to 2015

- Passenger Transport (LDV, Bus, Passenger Air & Rail, Recreational Boats)
- Freight Transport (HDV, Freight Air & Rail, Shipping)

DOE Annual Energy Outlook 2015
TRUCKING IS A SIGNIFICANT DRIVER

Global Growth by Transport Mode

Source: ITF Transportation Outlook 2015
Market driven partnership that helps businesses:

- Save money
- Stay competitive
- Demonstrate economic and environmental leadership by moving goods in the cleanest most efficient way possible.
- Exchange performance data in ways that contribute to a stronger and more competitive economy and healthier air
HOW SMARTWAY WORKS

- Companies submit data on freight transportation activity using EPA assessment and tracking tools

- Tools calculate annual carbon footprint along with annual emissions of other air pollutants from transporting goods

- EPA ranks companies by environmental performance

- Recognition for top 1 – 2% environmental performance
SMARTWAY APPROACH

- **Simplicity**
  - Standard benchmarking tools and methods

- **Accuracy**
  - Performance based assessment of CO$_2$, NO$_x$, PM

- **Flexibility**
  - Multiple metrics, multimodal, multi-fleet, multi-categories

- **Transparency**
  - Manageable granularity, protects sensitive information
WHAT SHIPPERS SEE

• Despite its importance, freight isn’t their main business
• Shippers want to strengthen their brands by highlighting sustainability efforts:
  • Carbon and sustainability reporting
  • Improving environmental performance
• But how to improve what you can’t see?
WHAT CARRIERS SEE

- Thin profit margins – fuel and wages = 64% of operating costs
- Shippers can’t value investments carrier efficiency, unless they “see” them
- New technologies and strategies can seem risky
TRUCK CARRIER DATA

- Short Haul vs. Long Haul
- Fuel types and gallons consumed
- Particulate Matter Reduction (pre-2006)
- “Cube Out” Percentage
- Model year and truck class
- Miles (revenue and empty)
- Average Payload (Tons) – Cargo Weight Only
- Average Capacity Volume (Cubic Feet)
- Percent Capacity Utilization (Excluding Empty Miles)
- Road Type / Speed Categories
- Average Annual Idle Hours per Truck
CARRIER PERFORMANCE RANKING

- The data are reviewed by EPA for quality (source, completeness) and consistency
- Once approved, EPA uses the data to generate six environmental performance metrics:
  - 3 pollutants: CO2, NOx, and PM
  - Expressed in: grams/mile, and grams/ton-mile
PERFORMANCE BENCHMARKING

- Emission metrics are benchmarked using performance ranges.
- All carriers within a given range receive the same benchmark; the midpoint of the range.
- This approach provides enough information to inform the market, while maintaining carrier confidentiality.

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 Performance Rankings

- SmartWay provides carrier emissions and relative rankings:
- By mode (Logistics, Multimodal, Rail, Air)
- By submodes within Trucking (15 trucking categories)
- Categorization helps to insure that comparisons are “apples to apples and oranges to oranges” i.e., fair
- Emissions and relative rankings are provided in a public spreadsheet on the SmartWay web page
SHIPPER DATA

- Shipper tool accounts for all its freight movements
  - Truck, rail, air, multimodal and logistics
- Activity data for amount of freight, distance shipped
  - Total miles and/or ton-miles contracted by SmartWay and non-SmartWay carriers
  - Flexibility for other data types
  - Freight characterization (avg density, avg payload)
- Optional: can assess operational and modal shift strategies
CARBON AND SUSTAINABILITY REPORTING

Step 1 - Complete the Shipper Tool

Step 2 - Generate SmartWay Data Reports

Step 3 - Use results in:
- Benchmarking and Operations
- Environmental Reporting
- Carbon Disclosure Submittals
- Shareholder Response
IMPROVING CARRIER RELATIONS

- SmartWay helps shippers improve carrier relations and helps carriers improve performance
  - Incorporate into carrier contracts, education and KSA’s
- Carriers win by saving money on fuel and maintenance costs
- Shippers win with more better data, improved sustainability
HOW CARRIERS CAN USE SMARTWAY TO GREEN SUPPLY CHAINS

• Use SmartWay reports to analyze emissions and see how this year’s performance compares with prior years’ and with peers
• Assess operations to identify best practices and areas for improvement
• Develop an improvement plan by benchmarking, and setting a goal to improve
• Work with SmartWay to consider fuel reduction strategies (aerodynamics, speed reduction, driver training and incentives, automatic transmissions, efficient tires)
• Investigate intermodal options: Choose more efficient modes and de-speed your supply chain as long as it meets customer requirements
• Investigate improved asset utilization: optimized trailer loading, reduced empty miles, fewer idle hours, tag team drivers
Featured Partner: Mesilla Valley Transportation

- Benchmarking is a great motivator
- Technology and operational innovations
- Sustainability Management – Present and Future

HOW SHIPPERS CAN USE SMARTWAY TO GREEN SUPPLY CHAINS

• Use the SmartWay data to analyze emissions
• Work directly with SmartWay on emission reduction strategies
• Choose more efficient modes and within mode, choose SmartWay over non-SmartWay
• Begin using more efficient SmartWay carriers
• Phase-in requirements as part of bid process and/or KPAs
• Provide incentives, like preferential fuel surcharge rates, bonus points in bid proposals, preferred lanes or delivery hours
• Assess freight network for opportunities to optimize: load-share, reduce empty backhauls, loading and routing software, flexible delivery hours, reduced packaging
BECOME A SMARTWAY AFFILIATE

• If your enterprise does not control freight shipments, you can still advance supply chain sustainability by becoming a SmartWay Affiliate.
  • Industry trade and professional associations
  • Environmental organizations
  • Nongovernmental organizations
  • Academic institutions
  • Municipal, county, state, and federal government agencies
  • Truck/trailer dealers and leasing companies
• SmartWay Affiliates commit to spreading the word about SmartWay within the freight transport industry, for example by educating members about the SmartWay program and supply chain sustainability.
• For more information, see https://www.epa.gov/smartway/become-smartway-affiliate
RECOGNIZING ACHIEVEMENT

- Annual SmartWay Excellence Award recognizes top 1% of all partners
  - Based on environmental performance
  - Recognizes large & small partners
- Multiple other ways to recognize partner achievements and showcase innovative strategies and practices
  - Events
  - Webinars
  - Social media
  - E-newsletter
  - Web site
  - Working with Affiliated groups
Save Fuel, Money and the Environment with a SmartWay Truck

A SmartWay tractor and trailer annually save 2,000 to 4,000 gallons of fuel and reduce CO2 emissions by up to 20% as compared to similar trucks on the road. Learn more at www.epa.gov/smartway
• Since 2004, SmartWay partners saved 29 billion dollars in fuel costs, and reduced harmful air pollutants by 103 million tons
• Corporations have benefitted from free access to a suite of harmonized tools and data for use in business analytics and sustainability reporting
QUESTIONS? THANK YOU!
Appendix
SMARTWAY 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 earlier version of SmartWay
  - Commission for Environmental Cooperation issued report recommending aligning North American freight efforts
  - EPA and NRCan working to further develop options for SmartWay in Mexico – which could set the stage for future Latin American efforts
• SmartWay is a leader in the Global Green Freight movement
• Building capacity for other countries to design Green Freight programs
• Published “How to Develop a Green Freight Program” available in English, Mandarin, Spanish, Portuguese, French
• Conduct trainings and share expertise
• Develop tools that can be adapted for other regions