WEBINAR HOUSEKEEPING

- Submit a question via the Questions pane on your GoTo control panel.

- After the presentation, as time permits, our EPA presenter will answer questions submitted via the Q&A box.

- Please complete the survey at the end of today’s webinar. Your feedback is important to us!
WEBINAR HOUSEKEEPING

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(www.epa.gov/smartway)
It takes you to this page: https://www.epa.gov/smartway/smartway-webinars-events
Select the “Past Webinar Resources” tab shown below.
THE BUSINESS CASE FOR SMARTWAY SHIPPERS

USEPA SmartWay Program

August 24, 2016

Presented by: Tracie Jackson Hall
YOUR PRESENTER

- Tracie Jackson-Hall
- USEPA SmartWay
- jackson-hall.tracie@epa.gov
WHAT WE WILL COVER

• Why Sustainability
• Why Freight Sustainability Matters
• The Benefits of SmartWay for Shippers
• How SmartWay Works
WHY SUSTAINABILITY?
CLIMATE IS A GLOBAL ISSUE

Global freight volumes and CO₂ emissions by corridor

Source ITF Transportation Outlook 2015
YOUR COMPANY IS ALREADY REPORTING

Figure [1.1] Overview of GHG Protocol scopes and emissions across the value chain
YOUR INVESTORS DEMAND IT

Fig. 2: Sustainable investing offers competitive results

MSCI KLD 400 Social Index versus MSCI US Index (June 1990 = 100)

Source: Bloomberg, FactSet, UBS, as of 3 July 2013
YOUR GOVERNMENT WILL REGULATE IT
YOUR CUSTOMERS REQUEST IT
YOUR COMPETITORS ARE DOING IT

- 4,500 organizations worldwide report to CDP
- Over 80% of the Global 500 report to CDP
YOUR EMPLOYEES EXPECT IT
SUSTAINABILITY CHALLENGES NOT GOING AWAY

- RISK
- REGULATIONS
- RESPONSIVENESS
- REPUTATION
- RETENTION
WHY FREIGHT MATTERS
FREIGHT IS A SIGNIFICANT CONTRIBUTOR TO CLIMATE CHANGE

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.
- Freight is also the fastest growing source of transport GHGs.

2014 Data - Inventory of U.S. Greenhouse Gas Emissions and Sinks (EPA 2016)
TRANSPORTATION COSTS ARE ON THE RISE

- Truck capacity will become more limited due to difficulty recruiting, training and hiring drivers
- Regulations are putting pressures on carriers, further restricting capacity
- Cost of fuel and fuel surcharges are rising
SUPPLY CHAINS ARE WHERE THE EMISSIONS AND THE OPPORTUNITIES ARE

SUPPLY CHAINS ARE RESPONSIBLE FOR UP TO 4 TIMES THE GREENHOUSE GAS EMISSIONS OF A COMPANY’S DIRECT OPERATIONS
SO IF FREIGHT IS SO IMPORTANT, WHY IS IT MISSING FROM SO MANY CORPORATE SUSTAINABILITY PLANS?
BARRIERS TO ACCOUNTING FOR FREIGHT

- Competing priorities
- Lack of access to data
- Not in your control
- Don’t know where to begin
SMARTWAY HELPS YOUR COMPANY OVERCOME THESE BARRIERS
HOW SMARTWAY HELPS SHIPPERS
YOU CAN’T IMPROVE WHAT YOU DON’T MEASURE

- EPA’s SmartWay program helps companies achieve freight sustainability throughout their supply chain by measuring, benchmarking, and improving freight transportation efficiency.
SMARTWAY PROVIDES

- Standardized accounting system
- Data tracking and reporting tools
- Database of carrier information
- Resources to help you engage your logistics partners
- Training to get started
- Personalized support
HOW SMARTWAY WORKS
THREE KEYS TO FREIGHT EFFICIENCY

1. Measure
2. Benchmark
3. Improve
HOW SMARTWAY SYSTEMS HELP YOU TRACK PERFORMANCE

<table>
<thead>
<tr>
<th>Fuel Usage (gallons)</th>
<th>Activity (miles)</th>
<th>Freight Shipped (payload)</th>
</tr>
</thead>
</table>

SmartWay Shipper Tool
- Transportation carbon footprint
- Operational improvement assessment
- Carbon disclosure reporting metrics
SMARTWAY PROVIDES AN INTEGRATED SYSTEM

- Truck
- Rail
- Barge
- Multimodal
- Logistics

- Air
- OGV
SMARTWAY IS DESIGNED TO HELP WITH SHIPPER SCOPE 3 REPORTING

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

SMARTWAY U.S. ENVIRONMENTAL PROTECTION AGENCY

WRI-GHG Protocol
CARRIERS ARE RANKED TO HELP YOU FIND THE BEST

- 15 Truck Carrier Categories
  - TL, LTL, Refrigerated, Tanker, etc.
- Barge, Rail, Air, Multimodal, Logistics
- 6 Emission Factors
  - 2 metrics x 3 pollutants

**Quintile Rankings**

Illustration: 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 PARTNERS ARE RECOGNIZED LEADERS

SmartWay Excellence Awards
WAYS SHIPPERS CAN TAKE ON FREIGHT SUSTAINABILITY

- Use SmartWay to measure, benchmark and improve the performance of your freight operations
- Use the SmartWay’s registered carrier data to identify carriers that can be partners in achieving sustainability goals
- Ship more freight to SmartWay carriers
- Use your performance metrics to set goals for improved efficiency
MORE WAYS...

· Work with your transportation providers to find efficiency opportunities

· Reward good performance by encouraging carriers to improve efficiency and giving business to more efficient carriers

· Find ways to increase load efficiency, eliminate trips and empty hauls, improve your transportation network, and save money while protecting the environment.
# Financial Analysis: Freight Sustainability Initiatives

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Annual Carbon Reduction</th>
<th>Upfront Cost</th>
<th>Annual Savings</th>
<th>Months for Payback</th>
<th>NPV (10 year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage software to increase load factor on 4,500 outbound trucks by 5 percent</td>
<td>124 metric tons CO2</td>
<td>$50,000</td>
<td>$160,000</td>
<td>4</td>
<td>$1,073,773</td>
</tr>
<tr>
<td>Convert 2,000 truck trips to intermodal</td>
<td>1,800 metric tons CO2</td>
<td>$2,000,000</td>
<td>$1,420,000</td>
<td>17</td>
<td>$7,973,486</td>
</tr>
<tr>
<td>Establish a DIY co-loading arrangement for 1,000 annual truck trips</td>
<td>450 metric tons CO2</td>
<td>$300,000</td>
<td>$500,000</td>
<td>7</td>
<td>$3,211,791</td>
</tr>
<tr>
<td>Add a distribution center to network to enable significant reduction in outbound miles</td>
<td>6,900 metric tons CO2</td>
<td>$20,000,000</td>
<td>$5,700,000</td>
<td>42</td>
<td>$20,034,415</td>
</tr>
</tbody>
</table>

Source: EDF
ABOUT SMARTWAY REGISTERED PARTNERS

• Since 2004, over 3,000 companies have become SmartWay-registered
  ▪ top 100 U.S. truck carriers
  ▪ all Class 1 rail lines
  ▪ Fortune 500 shippers from key economic sectors
  ▪ major logistics firms
  ▪ recently added: barge and air cargo carriers

• Partners gain access to individual partner account manager, best practices, forums and events, education and outreach, technical assistance
WHAT SMARTWAY PARTNERS HAVE ACHIEVED SO FAR

- In 11 years, cut 72 MMT CO₂, 1.4 M tons NOₓ, 59,000 tons PM
  - saving businesses and communities nearly $25 billion in fuel costs
- Conserved 170 million barrels oil
  - equivalent to
    - taking 15 million cars off the road for an entire year
    - eliminating annual energy use in over 6 million homes
REASONS TO REGISTER WITH SMARTWAY

• Your stakeholders care…and so should you
  • They are looking for companies that take the environmental challenges we face seriously
  • They’re increasingly demanding transparency and performance

• Green=Green
  • Fuel efficiency cuts emissions and costs
  • The business strategies that are good for your bottom-line are also good for your sustainability efforts

• Go green now, less risk later
  • Litigation over environmental issues, including climate, is likely to increase

• You can’t improve what you don’t measure
  • SmartWay Shippers measure, benchmark, track and improve their performance on the metrics that matter most to freight supply chain sustainability
FOR MORE INFORMATION

- WEBSITE-- www.epa.gov/smartway
- TO LEARN HOW TO REGISTER:
  https://www.epa.gov/smartway/become-smartway-shipper-partner
- EMAIL--smartway_transport@epa.gov
- PHONE-- SmartWay Helpline:734-214-4767