

SmartWay Transport Partnership

Faster Freight-Cleaner Air
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Kristin Riha
U.S. Environmental Protection Agency

What is SmartWay Transport Partnership?

- Public-Private partnership between EPA and transportation industry to conserve fuel and reduce emissions
- Free to Join; Open to Companies of any Size
- Simple & Easy
 - Trucking companies join the partnership and agree to improve fuel efficiency (reduce fuel consumption) and reduce emissions over a 3 year period.
 - Shipping companies join the partnership and agree to ship 50% or more of their product with SmartWay trucking partners, as well as improving their operations over a 3 year period.

Benefits for the Environment

- **Lessen health impacts from diesel emissions:**
 - Exacerbates asthma, respiratory and cardiac illness
 - Possible human carcinogen
- **Improve air quality:**
 - 474 counties are out of compliance with the 8-hour ozone standard
 - 225 counties are out of compliance with the particulate matter standard
- **Lessen the impacts on our most vulnerable populations:**
 - Children, the elderly and people with existing health conditions
- **Reduce CO₂ emissions that contribute to climate change:**
 - Every gallon of diesel consumed creates 22.2 pounds of CO₂
- **Improve energy security:**
 - Fuel prices, availability

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Benefits for Partners

- **Shippers and Logistics Companies:**
 - Better info about transportation footprint
 - Demonstrate corporate citizenship by hiring environmentally minded carriers
- **Carriers:**
 - Gain competitive advantage as shippers strive to move more goods with SmartWay Transport carriers
 - Track emissions and fuel consumption
 - Do cost-benefit analyses for different technologies and/or strategies
- **Affiliates:**
 - Access to tools for marketing and outreach
 - Public recognition for promoting environmental goals

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How do Partners Measure Progress?

- **Freight Logistics Environmental and Energy Tracking Performance Model:**

- Carriers:

- Calculate tons of CO₂, NO_x, and PM
- Determine effectiveness of strategies used in the fleet (e.g., aerodynamics, idling reduction)
- Project the effectiveness of strategies a fleet could add in the future.
- Estimate cost savings and payback period for strategies

- Shippers:

- Track percentage of freight shipped with SmartWay Transport Carrier Partners
- Measure their environmental footprint

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Types of Strategies

For both New and Existing Trucks & Locomotives

- Idling Reduction
- Improved Aerodynamics for tractors and trailers
- Low rolling resistance tires including super singles
- Speed management
- Increased/improved inter-modal operations
- Exhaust after-treatment devices
- Lightweight materials
- Advanced lubes
- Alternative and sustainable fuels
- Hybrid technologies

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Idle Reduction Technologies

For Trucks and Locomotives

Average fuel savings

Trucks: 1 gal/hr

Rail: 4 - 12 gal/hr

Emissions Controlled

CO₂, NOx, and PM

- Automatic Shut-Down/Start Up System
- Battery Powered Systems
- Diesel Driven Heating System
- Auxiliary Power Unit/Generator Set
- Truck Stop Electrification



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Trailer Aerodynamics

Average fuel savings

Trucks: 5%

Emissions Controlled

CO₂, NOx

- Trailer Fairings, Side-skirts
- Nose Cone and Trailer Tail



Low Rolling Resistance Tires

Single Wide Base and Improved Duals

Average fuel savings

Trucks: 4 - 5%

Emissions Controlled

CO₂, NOx

- Single-wide tires and aluminum wheels
 - Reduced rolling resistance
 - Reduced weight
- Low rolling resistance duals can be as effective as singles



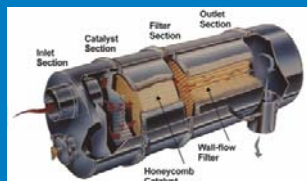
Exhaust After-Treatment Devices

Average fuel savings

Emissions Controlled

PM

- Diesel Oxidation Catalysts
 - Estimated cost: \$1,000
 - Reduce PM by 25% – 40%
- Particulate Matter Filters
 - Estimated cost \$6,000
 - Reduce PM by 80% – 90%



Types of Shipper Strategies

- Shippers ship more freight with SmartWay Transport Carriers
- Shippers implement facility and operational measures to improve efficiency
 - Use of Intermodal Shipping
 - Full Truckloads
 - Idle Reduction Policies at Loading Facilities



ATTENTION DRIVERS:

GREEN MOUNTAIN
IS A MEMBER OF THE
EPA'S SMARTWAY TRANSPORT PARTNERSHIP.

**GREEN MOUNTAIN HAS AN
IDLE REDUCTION POLICY:**
PLEASE TURN OFF YOUR ENGINES
WHILE ON SITE AWAITING
TO BE LOADED/UNLOADED.

**THANK YOU FOR
HELPING US WORK TOWARDS A
CLEANER ENVIRONMENT.**

SmartWay
Transport Partnership
It's Environmentally Profitable.

Marketing and Recognition



**CALCULATE YOUR SAVINGS
TO THE ENVIRONMENT. TO YOUR BOTTOM LINE.**



**For logistics managers, SmartWay
can add up to 7% in fuel savings.**

SmartWay Transport helps shippers and for-hire carriers lower greenhouse gases and other emissions, while at the same time giving the average truck a fuel savings of \$2,000 per year.

To find out more about this new partnership, call for your info kit at 1-734-214-4767 or log onto www.epa.gov/smartway.

SmartWay
Transport Partnership
Getting There With Cleaner Air

A new voluntary program from the
U.S. Environmental Protection Agency

SmartWay Today

- **Over 475 Partners in 41 U.S. states and Canada**
- **Shippers incorporating SmartWay participation into carrier hiring decisions**
 - IKEA North America and Sharp Electronics moving to 100% shipping with SmartWay Partners
- **Testing & Technology Verification:**
 - Demonstrate fuel saving AND emission reduction potential of emerging technologies for legacy truck fleet



SmartWay Grow and Go

- Promotes the environmental benefits of renewable fuels
- Launched Oct. 26, 2006 at the Future Farmers of America National Convention
- Goal - 25 percent of SmartWay Transport partners using renewable fuels by 2012, and 50 percent by 2020



www.epa.gov/smartway/growandgo/



www.epa.gov/smartway

smartway_transport@epa.gov

phone center (734) 214-4767

Kristin Riha, 415-947-4140, riha.kristin@epa.gov