

SmartWay Technology Upgrade Kits for Trucking Companies – An Innovative Financing Program to Reduce the Environmental Impact of Trucking



Concept Proposal

Presented to



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Summary

For virtually every trucking company, fuel is the second largest expense behind labor. Numerous technologies are currently available to help these companies reduce fuel consumption, however, one of the major barriers to their widespread adoption is a lack of investment capital.

The SmartWay Transport[®] Partnership is establishing several innovative financing programs to make these technologies more accessible to interested trucking companies. Greater use of these technologies will not only reduce fuel consumption and related costs to trucking companies, but it will also result in reductions in emissions of greenhouse gases and other harmful air pollutants. This Concept Proposal describes options for potential collaboration between SmartWay and Wachovia Corporation to establish a program that would make funds available to trucking companies for the purchase of SmartWay Technology Upgrade Kits.

SmartWay Transport Partnership

- Voluntary partnership between the U.S. Environmental Protection Agency (EPA) and the freight industry to reduce emissions from freight transportation. See detailed description in Attachment 1.
- Works with trucking companies and railroads to encourage the adoption of technologies that reduce fuel consumption and emissions.
- Works with freight shippers (companies such as IKEA, Nike, Lowe's, The Home Depot) to encourage them to ship more of their freight using trucking companies participating in the Partnership.
- Currently has 224 Partners, including 169 trucking companies, 25 shippers, 7 shipper/carriers, 8 railroads, and 7 logistics providers, and 8 affiliates. A current Partner list is provided in Attachment 2.
- More information can be found on the program website: <http://www.epa.gov/smartway>

Fuel Use in the Trucking Industry

- A typical long-haul truck (an "18-wheeler") travels approximately 100,000 miles per year.
- A long-haul truck traveling 100,000 miles consumes approximately 18,000 gallons of diesel fuel per year.
- Fuel costs for most trucking companies have increased by 50-75% in the past year.
- Long-haul trucks often achieve only 5 or 6 mpg, so fuel economy improvements of as little as 0.1 mpg can have enormous impacts on a trucking company's bottom line.
- Long-haul truck drivers typically spend 2,400 hours per year idling (running the main diesel engine while the truck is at rest), consuming approximately 2,160 gallons of diesel in the process. This idling is often to provide heating or air conditioning to the truck cab while the driver sleeps.



The SmartWay Technology Upgrade Kit

Currently available fuel-saving and emission reduction technologies that might be included in the SmartWay Technology Upgrade Kit are (see Attachment 3 for additional details):

Technology	Cost¹	Monthly Loan Payment @ 5% for 48 months	Benefits² (Monthly Fuel Savings)
Idle Reduction Device – Bunk Heater	\$1,000	\$23	\$195
Idle Reduction Device – Auxiliary Power Unit (APU)	\$7,000	\$161	\$300
Aluminum Wheels for Single Wide Tires	\$3,000	\$69	\$150
Trailer Aerodynamics	\$2,400	\$55	\$188
Emission Control Device – Diesel Oxidation Catalyst	\$1,000	\$23	\$0 (20-50% PM emission reduction)
Emission Control Device – Particulate Matter (PM) Filter	\$6,000	\$138	\$0 (90% PM emission reduction)

Upgrade Kits purchased by trucking companies may include one or more of these technologies, and can be customized to the specific needs of the company.

Program Concept

SmartWay and Wachovia Corporation might collaborate to develop one or more programs aimed at providing capital to trucking companies for the purchase of fuel saving and emission reduction devices. Options for this collaboration include, but are not limited to:

- Development of a low-interest loan program, in which Wachovia makes loans available at below-market rates or with preferred terms.
- Development of a performance contracting program in which trucking companies receive equipment, paid for by Wachovia, and make payments to Wachovia of a portion of the fuel savings they achieve.

To increase the value of the loans or investments that would be made by Wachovia through these programs, the target audience for these programs would be trucking companies in the U.S. and Canada operating a fleet of at least 50 trucks.

¹ Equipment cost may vary depending on vendor, equipment specifications, quantities purchased, etc.

² Monthly fuel savings are estimated for a long-haul truck using 18,000 gallons of diesel per year and idling 1,200 hours per year for bunk heaters, and 2,400 hours per year for APUs. Fuel cost is \$2.50/gallon.

Potential Market and Lending Potential

- Approximately 5,000,000 trucks operating in the U.S. SmartWay Partners operate approximately 300,000 trucks.
- Initial target penetration for the financing program: 50,000 trucks.
- Lending potential: \$250,000,000 assuming average cost of SmartWay Upgrade Kit is \$5,000 (many companies will not take the full package, but only one or two pieces of equipment).

Benefits to Wachovia

- Size of the trucking industry presents the potential for billions of dollars of lending or investment.
- Opportunity to demonstrate commitment to environmental lending or investment by setting up a program targeted at environmental technologies, and possibly offering discounted rates or other incentives.
- Opportunities to market the program jointly with EPA, thereby raising the environmental profile of Wachovia.

Attachment 1

Overview of the SmartWay Transport Partnership

SmartWay Transport Partnership Fact Sheet

What is SmartWay?

- Voluntary Partnership between EPA and the freight industry to reduce fuel consumption as well as greenhouse gases and other air emissions.
- Developed jointly by EPA and several carriers and shippers, including Schneider, Swift, Yellow/Roadway, UPS, Fedex, Home Depot, and IKEA.
- Freight industry interests – reduced fuel consumption and improved public image.
- EPA interests – reduced emissions (CO₂, NO_x, PM) and improved energy security.

SmartWay Emission Reduction Goals

- 33 Million metric tons of CO₂ annually by 2012.
- 200,000 metric tons of NO_x annually, with additional reductions in PM and air toxics.
- 150 million barrels of oil annually (equivalent to removing 12 million cars from the road).

How SmartWay Works

- Partners receive benefits, including technical assistance and recognition.
- Freight Carriers (Trucking and Rail Companies) – Agree to work toward improved efficiency and reduced fuel consumption over a 3-year period.
- Freight Shippers – Agree to work toward shipping more of their product with SmartWay Carrier Partners, as well as improving their operations.
- Logistics Companies – Agree to work toward bringing contracted carriers into the Partnership, as well as shipping more freight with SmartWay Carrier Partners.
- Affiliates – Agree to work to promote SmartWay to their members and constituents.

Current Partners

- 224 freight shippers, carriers, and affiliates in 38 States and Canada (as of Sept. 28, 2005). A list of current Partners is provided in Attachment 2.

Public Service Announcement Campaign

- Initiated in Dec. 2004 to raise awareness of the Partnership among industry and the public.
- 5 PSAs developed and placed in more than 25 publications.
- Multiple free full-page or multi-page placements received from Forbes, Business Week, Inc., and Fast Company.

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.

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

SHIP SMARTER



An environmentally appealing way to transport goods that's also deliciously profitable.

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.

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

What SmartWay Partners are Saying



"Our participation in SmartWay is an important piece of our global fleet strategy. With our first sustainability report issued last fall, we set aggressive goals for reducing emissions and increasing fuel efficiency. SmartWay provides another way to push ourselves to meet, and exceed, those goals."

-- Mike Herr, V.P. of Environmental Affairs, United Parcel Service (UPS)



"I encourage everyone to join Swift in becoming a member of SmartWay. The very worst thing that'll happen to you is you'll save fuel which means you'll make more money."

-- Dave Berry, Vice President Swift Transportation



"By designing this program, it shows me and other carriers that EPA is concerned about our business as well as clean air."

-- Rick Coomes, President, Coomes Inc.



"Smartway...incorporates elements that we feel are consistent with how we approach our business and how we want our service providers to approach things as well."

-- Sabina Strautman, Environmental Transport, IKEA USA



"H-E-B has always believed in putting customers and community first. Being a good neighbor means safeguarding the health and welfare of our customers and Partners. SmartWay Transport offers opportunities to learn and lead the way toward a clean transportation future."

-- Charles Butt, Chairman and CEO, H-E-B



"By joining SmartWay Transport Partnership, Bison Transport demonstrates its strong environmental leadership and corporate responsibility. SmartWay Transport is a perfect fit for us as an organization, and its goals tie directly into Bison Transport's on-going mission of becoming more efficient and environmentally responsible."

-- Don Streuber, President & CEO, Bison Transport



"Averitt Express understands that the future of our world rests on the investments we make to care for the resources of today. Whether that manifests itself as following safe driving and freight handling procedures or fulfilling our obligation to protect the environment through avenues such as EPA's Smartway program, Averitt Express is answering the future's call."

-- Scott Wolf, Vice President of Corporate Services, Averitt Express



"Part of the mission of Interface, Inc. is to honor the places where we do business by endeavoring to become the first name in industrial ecology. We are striving for zero emissions in our operations, including the transportation of our raw materials and finished products. We believe that cooperative initiatives, such as SmartWay Transport, are an important step toward measuring and reducing our environmental ground transportation footprint."

-- Michael Bertolucci, Senior Vice President, Interface, Inc.

Attachment 2

Current Partner List

SmartWay Transport Partnership
Partner List
(216 Partners and 8 Affiliates as of September 28, 2005)

Freight Carriers (Trucking) – 169 Partners

AAA Cooper Transportation (AL)
A&A Express, Inc. (SD)
Ace-Way Freight Systems 2003 Inc. (Canada)
Accelerated Freight Group (AL)
ADM Trucking Inc. (IL)
AJ Saragusa Trucking Company Inc. (TX)
Alabama Motor Express, Inc. (AL)
Alert Motor Freight, Inc. (NJ)
Alvan Motor Freight (MI)
American Cartage Inc. (Canada)
AMI Transport Service (MA)
Arfsten Transfer Inc. (MN)
Arndt Trucking (SD)
Arnold Transportation Services (FL)
Arrow Trucking Company (OK)
ASL Transportation (NJ)
Atkinson Freight Lines (PA)
Averitt Express (TN)
B.R. Williams Trucking, Inc. (AL)
Bartels Truckline Inc. (MN)
Baxter Healthcare (IL)
Bear Cartage & Intermodal Inc. (IL)
Bell City Transport Systems (Canada)
Bison Transport Inc. (Canada)
Braun's Express Inc. (MA)
Burns Motor Freight, Inc. (WV)
Camionnage C.P. Inc. (Canada)
Can-Am West Carriers Inc. (Canada)
Cardinal Freight Carriers, Inc. (NC)
Celadon Trucking Services, Inc. (IN)
Central Freight Lines (TX)
Circle City Transport, Inc. (AL)
Commercial Transportation Inc. (PA)
ContainerFreight EIT, LLC (CA)
Contract Freighters, Inc. (MO)
Coomes Inc. (KS)
C. R. England, Inc. (UT)
Currier Trucking Corp. (NH)
Damian Trucking, Inc. (IL)
Davis Cartage Co. (MI)
Davis Express, Inc. (FL)
DHL Express (FL)
Dick Lavy Trucking, Inc. (OH)
Diversified Transfer and Storage (MT)
Dizco Inc. (SD)
Double NN Transport Ltd. (Canada)
Douglass Distributing Carriers (TX)
ECM Transport, LLC (PA)
Estes Express Lines (VA)
Fastrax Transportation (Canada)
Farruggio's Express (SC)
FedEx Express Corp. (*Charter Partner*) (TN)
FedEx Freight System, Inc. (TN)
Floyd & Beasley Transfer Co., Inc. (AL)
Floyd Wild Trucking, Inc. (MN)
FMI, West (CA)
Food Lion LLC (NC)
Frerichs Freight Lines, Inc. (IL)
Frito-Lay Inc. (TX)
Frock Bros. Trucking, Inc. (PA)
Gangloff Industries, Inc. (IN)
Garufi Logistics LLC (OH)
Genmar Transportation Inc. (MN)
G.I. Trucking (CA)
Gordon Trucking, Inc. (WA)
Green Mountain Coffee Roasters (VT)
Greenbush Logistics, Inc. (AL)
GTL Transportation (IA)
Gwaltney Transportation Co. Inc. (VA)
Hannaford Trucking Company (ME)
H.F. Campbell & Son, Inc. (PA)
Hirschbach Motor Lines, Inc. (NE)
Hub Group, Inc. (IL)
Hudson's Bay Company (Canada)
Hunkes Transfer, Inc. (MN)
H.O. Wolding Inc. (WI)
IFA Trucking (FL)
International Motor Freight (NJ)
Interstate Distributor Co. (WA)
JK Trucking (Canada)
J&L Wilson Transportation, Inc. (IL)
J.B. Hunt Transport, Inc. (AR)

John Christner Trucking, Inc. (OK)
 Jones Brothers Trucking Inc. (MT)
 Joseph John Belovich, Jr. (TX)
 J&R Schugel Trucking, Inc. (MN)
 KBD Transportation (Canada)
 Kennesaw Transportation, Inc. (GA)
 Knight Transportation, Inc. (AZ)
 Lakeville Motor Express, Inc. (MN)
 Langford Inc. (MN)
 Lasco Bathware Trucking Co., Inc. (MI)
 Lavigne Truck Lines (Canada)
 LBAS Transportation (GA)
 Linde Gas, LLC (OH)
 Maverick Transportation Inc. (AR)
 McFarland Truck Lines, Inc. (MN)
 McKelvey Trucking Company (AZ)
 MDE&E Trucking (TX)
 Metropolitan Trucking, Inc. (NJ)
 Michel Distribution Services, Inc. (MD)
 Midwest Specialized Transportation, Inc. (MN)
 MST Freight Services, Inc. (FL)
 Muir's Cartage Limited (Canada)
 Muir's International Inc. (Canada)
 National Distributors Inc. (IN)
 National Freight, Inc. (NJ)
 New England Motor Freight (NJ)
 Nick Strimbu Inc. (OH)
 Overnite Express, Inc. (MN)
 Overnite Transportation Company (VA)
 PAF Transportation, Inc. (ME)
 P.A.M. Transport, Inc. (AR)
 Panther II Transportation, Inc. (OH)
 Paramount Truck Lines Ltd. (Canada)
 Paschall Truck Lines Inc. (KY)
 PCC Logistics (CA)
 Pike Transportation, Inc. (AL)
 Pitt Ohio Express, LLC (PA)
 Plains Transportation (TX)
 Pottle's Transportation, Inc. (ME)
 Quad/Graphics, Inc. (WI)
 Refrigerated Food Express, Inc. (MA)
 R & E Enterprises (MN)
 Rhett Butler Trucking, Inc. (AL)
 Rinchem Company Inc. (NM)
 R&L Trucking, Inc. (AL)
 RoadLink USA East (PA)
 Roehl Transport, Inc. (WI)
 Schneider National, Inc. (*Charter Partner*) (WI)
 Shaw Transport, Inc. (GA)
 Signature Truck Lines, Inc. (Canada)
 Smithfield Packing Transportation Co. Inc. (VA)
 Southeastern Freight Lines Inc. (SC)
 Sprint Recycling (NY)
 Stevens Transport (NY)
 Styline Transportation, Inc. (IN)
 Sub Zero Transportation, Inc. (NE)
 Summitt Trucking LLC (IL)
 Swift Transportation (*Charter Partner*) (AZ)
 Taz Trucking (Canada)
 Terra Renewal Services (AR)
 Texas Department of Transportation (TX)
 Texas Star Express (TX)
 Tig Transportation (NY)
 TP Freight Lines (OR)
 Transport America (MN)
 Transways Motor Express Co., Inc. (NJ)
 Transport Robert LTEE (Canada)
 Trailwood Transportation, Inc. (MN)
 Triple S Trucking (NE)
 Two Cool Trucking Corp. (NC)
 Unisource Worldwide, Inc. (GA)
 UPS (*Charter Partner*) (GA)
 US Xpress Enterprises, Inc./Xpress Global
 Systems, Inc (TN)
 USA Motor Express Inc. (AL)
 USA Cartage, Inc. (MD)
 USA Truck, Inc. (AR)
 VaughanTransport, Inc. (GA)
 Vitran Logistics (Canada)
 VOA Corporation (FL)
 VTL Group (Canada)
 Wausau Carriers, Inc. (WI)
 Watkins Motor Lines, Inc. (MT)
 Watkins & Shepard Trucking, Inc. (MT)
 Wellborn Transportation, Inc. (AL)
 Werner Enterprises, Inc. (NE)
 Whitehead Bros, Inc. (AL)
 YellowRoadway Corp. (*Charter Partner*) (OH)

Freight Carriers (Rail) – 8 Partners

Burlington Northern Santa Fe Railway Co. (KS)
 Canadian National Rail (Canada)
 Canadian Pacific Railway (Canada)
 CSX Transportation (FL)

Kansas City Railway Company (MO)
Norfolk Southern Corporation (VA)

Pacific Harbor Line, Inc. (CA)
Union Pacific Railroad (NE)

Freight Shippers – 25 Partners

BND Automotive (OH)
Canadian Hydrogen Energy Company (Canada)
Canon U.S.A., Inc. (*Charter Partner*) (NY)
Clean Diesel Technologies, Inc. (CT)
Cozort International LLC (MO)
Dell Products L.P. (TX)
IdleAire Technologies (TN)
IKEA North America Services, LLC (*Charter Partner*) (PA)
Interface, Inc. (*Charter Partner*) (GA)
J & J Industries, Inc. (GA)
Labat-Anderson, Inc. (VA)
Lowe's (NC)

Lubri-Loy (MO)
Michelin North America (SC)
Nike (*Charter Partner*) (OR)
OFS (IN)
Owens Corning (OH)
Philips & Temro Industries (MN)
Pressure Systems International (TX)
Sharp Electronics Corporation (NJ)
Shurepower, LLC (NY)
The Home Depot, Inc. (*Charter Partner*) (GA)
Transportation Systems Solutions, LLC (NC)
Volvo Logistics North America (NC)
Walgreen Co. (IL)

Shipper-Carriers – 7 Partners

Bridgestone-Firestone North American Tire, LLC (TN)
Coca-Cola Enterprises, Inc (*Charter Partner*) (GA)
Dennis K. Burke Inc. (MA)
H-E-B (*Charter Partner*) (TX)

Schwan's Logistics, LLC (MN)
Tyson Foods, Inc. (AR)
Wal-Mart Stores, Inc. (AR)

Logistics Companies – 7 Partners

AFN (Advantage Freight Network) (IL)
APL Logistics (FL)
BNSF Logistics (AR)
CH Robinson Worldwide, Inc. (MN)

Celtic International (CA)
NYK Logistics (Americas) (FL)
The Radiant Group, LLC (KY)

Affiliates – 8 Organizations

Alliance to Save Energy (DC)
Association of American Railroads (DC)
Michigan Trucking Association (MI)
Mid-West Truckers Association (IL)

Nebraska Trucking Association (NE)
New Jersey Motor Truck Association (NJ)
Washington Trucking Associations, Inc. (WA)
Wisconsin Motor Carriers Association (WI)

Attachment 3

Overview of Fuel-Saving and Emission- Reduction Technologies

Overview of Fuel-Saving and Emission-Reduction Technologies

Disclaimer: The benefits described in this document are estimations only, and are based on a number of assumptions. Actual fuel savings and emission reductions may be higher or lower, and will depend on a variety of factors, including equipment type, driver performance, distances traveled, vehicle speed, etc.

Technology	Description	Cost	Benefits ³
Idle Reduction Device – Bunk Heater	 <p>Small, lightweight, diesel fuel-fired device mounted in the cab that provides heat for cab comfort. Does not include any air conditioning capabilities.</p>	Approx. \$1,000	Approx. 5% fuel savings assuming 1,200 hours idling per year. Additional reduction in engine wear-and-tear.
Idle Reduction Device – Auxiliary Power Unit	 <p>Small diesel-powered generator mounted outside the cab that provides heat, air-conditioning, and electrical power to run appliances.</p>	Approx. \$6,000 - \$8,000	Approx. 8% fuel savings assuming 2,400 hours idling per year. Additional reduction in engine wear-and-tear.
Single Wide Tires	 <p>Traditional dual tires are replaced with one single wide tire and aluminum wheel. Can be applied to all tractor and trailer tire positions except for the steer tires.</p>	Approx. \$3,000	Approx. 4% fuel savings.
Trailer Aerodynamics	 <p>Fairings added to the front and underside of the trailer to reduce drag.</p>	Approx. \$2,400	Approx. 5% fuel savings.
Emission Control Device – Oxidation Catalyst	 <p>A device added to the tractor's exhaust system to reduce the emissions of particulate matter and other pollutants.</p>	Approx. \$1,000	Approx. 20 – 50% reduction in particulate matter.

³ All savings assume a Class 8B tractor trailer traveling approximately 100,000 miles per year.