



SmartWay Financing:

Creating Sustainable Financing Strategies

SmartWay Transport Partnership

U.S. Environmental Protection Agency



SmartWay Program Overview

○ What is SmartWay?

- Public – Private Partnership designed for the freight industry
- Improves trucking fuel efficiency
- Reduces GHG emissions
- Saves trucking companies money

○ SmartWay Status

- Goals, by 2012
 - Save 3.3 - 6.6 billion gallons of diesel fuel per year
 - Reduce 36 – 72 million tons of CO2 and 200,000 tons of NOx emissions
- Current Partner Stats:
 - Over 1,500 Partners as of February 27, 2009
 - Drive over 584,000 trucks (7% of industry)
 - Travel over 51 billion miles per year (24% of industry)
 - Consume over 12 billion gallons of fuel (24% of industry)
- For 2009 - Partners will save:
 - 6.9 million tons of CO2
 - 1,000 tons of PM
 - 41,000 tons of NOx
 - Save over 625 million gallons of diesel fuel this year;
 - Freight industry ~\$1.5 billion in annual fuel and maintenance costs.

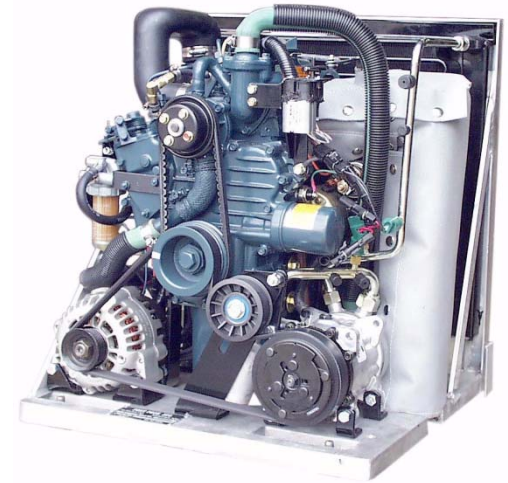
SmartWay Financing

- Barriers:
 - With today's economic issues, truck drivers are having a difficult time financing the purchase of fuel-efficient technologies for their vehicles
- Goals:
 - Create innovative and sustainable financing for energy efficient and emission control technologies
 - Develop public/private partnerships for innovative financial programs
- Loans for SmartWay Upgrade Kits
 - Finance fuel saving strategies (e.g., APUs, aerodynamics, tires)
 - Pay back loan from monthly fuel savings
- Loan for cleaner trucks and equipment
 - More environmental controls = Better financing rates and/or terms

SmartWay Upgrade Kit Technologies

○ Fuel-Saving Technologies:

- Idling Reduction Technologies
 - Auxiliary Power Unit/Generator Set
 - Battery Powered Systems
 - Diesel Driven Heating System
- Low Rolling Resistance Tires
- Advanced Tractor/Trailer Aerodynamics



Idle Reduction Technologies

For Trucks and Locomotives

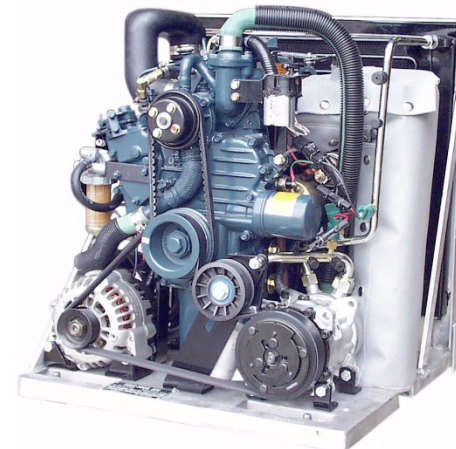
Average fuel savings Emissions Controlled

Trucks: 1 gal/hr

CO₂, NO_x, and PM

Rail: 4 - 12 gal/hr

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



Low Rolling Resistance Tires

Single Wide Base and Improved Duals

Average fuel savings Emissions Controlled

Trucks: 4 - 5%

CO₂, NO_x

Single-wide tires and aluminum wheels

- Reduced rolling resistance
- Reduced weight
- Low rolling resistance duals can be as effective as singles



Trailer Aerodynamics

Average fuel savings Emissions Controlled

Trucks: 5%

CO₂, NO_x

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



SmartWay Upgrade Kit Loan - Example

Device	Cost/Unit (Retrofit)	PM Reduction	NOx Reduction	FE/CO ₂ Change
Super Single Tires w/ alum. wheels	\$5,600	--	4%	4%
Trailer Aero Kit	\$2,400	--	5%	5%
APU	\$8,500	5% - 9%	9%	9%
Totals:	\$16,500	5 - 9%	17%	17%

For a truck traveling 100,000 miles/year @ 6 mpg (16,667 gallons /year)

- Fuel savings: 2,833 gallons @ \$4.50/gallon → \$12,748/year
- Payback period: \$16,500 / \$12,748 → ~1.3 years
- or a 5 year loan @ 12% APR:

Monthly Fuel Savings:	\$1080
Monthly Loan Payment:	(\$411)
Monthly Cash for Driver:	\$669



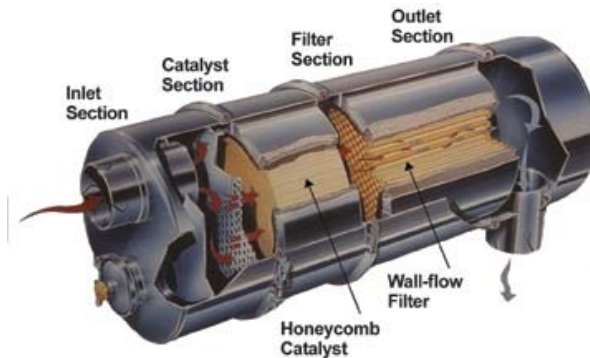
Loans for Cleaner Trucks and Equipment

- **Longer terms and greater flexibility:**
 - Truck/equipment with PM filter costs \$100-200 per month less than same truck without a filter
 - Can apply to all types of diesel vehicles/equipment sold
 - Requests lenders to offer mix of new incentives for loans
 - Extended terms - Lower interest rates - Lower fees
 - Less collateral - More rapid approval - Tax credits/exemptions

- **Benefits of Cleaner Truck/Equipment Financing**
 - Financing the purchase of whole vehicle or equipment with an exhaust aftertreatment device can maximize diesel emission reductions and provide an incentive for consumers to purchase vehicle/equipment with more environmental controls
 - Changes the question from “Why would I retrofit?” to “How much money will I save if I buy this clean truck?”
 - Improves monthly cash flow
 - For many small to medium size companies: Cash flow is the key to staying alive in business

Exhaust After-Treatment Devices

- Diesel Flow Through Filter
 - Estimated cost: \$5,500
 - Reduce PM by 50%
- Particulate Matter Filters
 - Estimated cost \$10,000
 - Reduce PM by 80% – 90%



Truck and Bulldozer Loan Example

Trucks	2002 MY Truck on the Used Market	
	Standard Truck	Same Truck with PM Filter Extend loan by 12 months and lower interest rate to 6%
Purchase Price:	\$55,000	\$60,500
60 Month Interest Rate:	12%	6%
Monthly Payment:	\$1,101	\$902 (\$199 less)
Total Cost:	\$66,060	\$64,944

Construction	New Bulldozer	
	Standard Bulldozer	Same Bulldozer with PM Filter Lowers interest rate to 8%
Purchase Price:	\$250,000	\$265,000
60 Month Interest Rate:	12%	8%
Monthly Payment:	\$5,005	\$4,836 (\$169 less)
Total Cost:	\$300,300	\$290,160

Current SmartWay Financing Opportunities

○ SmartWay Clean Diesel Finance Program

- Recovery Act & Clean Diesel Grants
 - Award \$33.4 million to support low cost loan programs for clean diesel vehicles and equipment
- In 2008, EPA awarded \$3.4 million to support three loans programs to help small trucking companies reduce fuel costs and emissions
 - Loans are available from:
 - Cascade Sierra Solutions
 - Community Development Transportation Lending Services, Inc.
 - Owner-Operator Independent Drivers Association Foundation
- In June 2009, EPA will be awarding \$30 million from the Recovery Act funding for the SmartWay Clean Diesel Program to support the development of new financing programs
- www.epa.gov/smartway/transport/what-smartway/financing-clean-diesel-info.htm

○ SmartWay Finance Center

- Created “Lending Tree” type web portal to increase trucker access to traditional loans.
- Offers loans for trucks and equipment
- One application form to access multiple lenders
- Over 1000 application requests in 5 months
- www.smartwayfinancecenter.com

SmartWay Financing Center

The screenshot displays the SmartWay Finance Center website. At the top, the header reads "SMARTWAY FINANCE CENTER" with a phone number "Call 1-877-767-8875" and a "[Log-In]" link. The main banner features a truck with a sign that says "Smart Trucks, Smart Loans, The Smart Way." Below the banner, the left sidebar lists "Available Technology" (Idle Reduction, Aerodynamics, Wheels / Tires, SmartWay Certified Tractors, SmartWay Certified Trailers) and "Navigate to:" (SmartWay Clean Diesel Finance Program NEW, Home, Introduction, About Us, Lenders, Vendors, Contact Us). The main content area is titled "Get a fast loan quote Now – truck , trailer, & equipment loans and leases" and includes a "Start Your Loan Application Now:" section with a form. The form has three fields: "Loan Type" (SELECT dropdown), "Amount \$" (0), and "Location" (SELECT dropdown). Below the form is a green "START" button with a play icon and a truck icon. At the bottom, a disclaimer states: "This World Wide Web site is provided as a public service by the U.S. Environmental Protection Agency (EPA), SmartWay Transport Partnership. The purpose of this site is to efficiently and".

www.smartwayfinancecenter.com





WE'RE SHOWING YOU THE MONEY



INTRODUCING FLEXIBLE LOANS TO BUY FUEL-SAVING TECHNOLOGY

If you're a small trucking business, we can connect you to loan funds. The way you like: capital appraisals, financial paperwork and no collateral.

You can use the money to purchase fuel-saving technology found in the SmartWay® Upgrade Kit. The Upgrade Kit includes idle reduction devices, low rolling resistance tires and advanced tractor and trailer aerodynamics. In every case, the fuel savings will pay for the loan and then some. For more info visit www.epa.gov/smartway/financing.htm.



An incentive program from the
U.S. Environmental Protection Agency

All Concept 2.23.07



For More Innovative Financing Information...

- SmartWay Website
www.epa.gov/smartway
- SmartWay Call Center
(734) 214-4767
- E-mail
smartway_transport@epa.gov

