



## Carrier FLEET Model Short Version

(For Carriers with 20 or Fewer Trucks)

***EPA's SmartWay<sup>SM</sup> Transport Partnership is a voluntary program that recognizes Partners for setting and achieving greenhouse gas (GHG) reduction goals in freight transport.***

### **Becoming a SmartWay Transport Carrier Makes Good Business Sense**

- **Cost Savings:**

The Partnership promotes new technologies and management practices to save fuel, which saves you money, period.

- **Business-to-Business Advantage:**

SmartWay Transport Carriers are preferred by SmartWay Transport Shippers, and they want to ship their goods with you. Shipper Partners are already giving priority contracts to SmartWay Transport Carriers.

- **Technical Support:**

EPA will assist you in developing and meeting your goals.

- **Recognition for Your Existing Environmental Improvements:**

Your fleet's existing fuel efficiency strategies, coupled with continued improvements, determine your status in the Partnership. You get full credit for improvements made thus far.

- **Promotional opportunities and public recognition:**

The SmartWay Transport Partner brand of excellence is awarded to qualifying Partners as a visible cue to your business customers, clients, and consumers to use in their advertising and other promotional media. It tells them that you are a champion of environmental stewardship and helps them to make educated choices about SmartWay Transport(ed) products. Visible exposure through national and regional events, advertisements, articles, and special recognition are just a few ways that EPA commits to recognize your achievements.

### **Becoming a Partner is Easy**

Simply complete the information on page 2 and 4; and, mail, fax, or email this form/spreadsheet to

SmartWay Transport Partnership  
U.S. EPA Office of Transportation and Air Quality  
2000 Traverwood  
Ann Arbor, MI 48105  
Fax: (734) 214-4052  
Email: [smartway\\_transport@epa.gov](mailto:smartway_transport@epa.gov)

For more information about joining the SmartWay Transport Partnership or for other assistance, call us at (734) 214-4767.



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### Partnership Agreement

|    | Column C | Column F | Column I |
|----|----------|----------|----------|
| 66 | Company: |          |          |
| 67 | Contact: |          |          |
| 68 | Address: |          |          |
| 69 | City:    | State:   | ZIP:     |
| 70 | Phone:   | FAX:     |          |
| 71 | SCAC:    | E-Mail:  |          |

EPA's SmartWay Transport Partnership is a voluntary program that recognizes Partners for setting and achieving greenhouse gas (GHG) reduction goals in freight transport.

**With this agreement, the company named above, joins EPA's SmartWay Transport Partnership and commits to:**  
 Measure its environmental performance by completing the Short Version of the Freight Logistics Environmental and Energy Tracking (FLEET) performance model (page 4) of emission/fuel savings practices and technologies installed and/or used on tractors.  
 Improve its Point Total score by at least 15% per year for three years.  
 Report annually progress toward achieving performance by resubmitting Short Version of FLEET performance model each year.

**In return, EPA commits to:**  
 Increase public awareness of Partner participation in the SmartWay Transport Partnership by listing Partners on the EPA SmartWay Transport Partnership web site and in related educational, promotional and media materials.  
 Obtain express written consent from a Partner before publishing the Partner's name in any context or for any purpose other than those stipulated above.  
 Publicize the actual performance data of Partners only with a Partner's express permission, except as otherwise required by law.  
 Assist Partners in achieving goals, by working to address challenges, create incentives, and provide technical assistance and support (subject to appropriations).

**General terms:**  
 If the Partner or EPA defaults upon this agreement at any point, the agreement shall be considered null and void.  
 Either party can terminate the agreement at any time without prior notification or penalties or any further obligation.  
 EPA agrees not to comment publicly regarding the withdrawal of Partners.  
 EPA reserves the right to suspend or revoke Partner status for any Partner that fails to accomplish the specific actions to which it committed in the SmartWay Transport Partnership Agreement and subsequent Agreements.  
 The Partner agrees that it will not claim or imply that its participation in the SmartWay Transport Partnership constitutes EPA approval or endorsement of anything other than the Partner's commitment to the program. The Partner will not make statements or imply that EPA endorses the purchase or sale of the Partner's products and services or the views of the organization.  
 The Partner understands that it bears its own costs for participation in this program, and agrees not to submit a claim for compensation to EPA or any other Federal agency on the basis of this agreement.

**Authorized Partner Official:**  
 The undersigned understands and agrees to the terms of the EPA SmartWay Transport Partnership. Entering data below and then submitting to the EPA via Email, will constitute a "signature" for the purpose of this document.

|     |             |        |
|-----|-------------|--------|
| 104 | Signature:  | Title: |
| 106 | Print Name: | Date:  |

Return page 2 and 4 to:

EPA SmartWay Transport Partnership  
 2000 Traverwood  
 Ann Arbor, MI 48105

Or, Fax to 734-214-4906 Or, Email to [Smartway\\_transport@epa.gov](mailto:Smartway_transport@epa.gov)

For additional information about the SmartWay Program, access the SmartWay website at [www.epa.gov/smartway/](http://www.epa.gov/smartway/)

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## Frequently Asked Questions

1. *How do I fill out the FLEET Model form on page 4?*

- o Owner/ Operator (1 truck)  
Enter a 1 in ColumnB on lines that describe your truck (ColumnC)
- o Small Fleets (2 to 20 trucks)  
Enter number of trucks in ColumnB that have the characteristics described in ColumnC

The calculation for Column I is as follows:

$$\frac{\# \text{ Trucks from ColumnB}}{\text{Total Number of Trucks from Line 186}} \times \text{ColumnH}$$

The Shipper Index Factor (SIF) is based upon the total of ColumnH, using the table at the bottom of the form.

2. *How does my SmartWay Shipper Index Factor (SIF) compare to other truck operators' scores?*

The SmartWay SIF scores are grouped into three categories. The average performance of current SmartWay carrier Partners who have completed a FLEET model is shown in the table below:

| <u>SIF Score</u> | <u>% of Total</u> | <u>Performance</u>                      |
|------------------|-------------------|-----------------------------------------|
| 0.75             | 60                | • Good environmental performance        |
| 1.00             | 15                | • Very good environmental performance   |
| 1.25             | 25                | • Outstanding environmental performance |

3. *Why should I improve my SIF score?*

A higher SmartWay score shows better fuel efficiency. Fuel typically accounts for 20-25 % of the cost of operating a truck. Any fuel that is saved results in reduced costs. At the same time, using less fuel lowers greenhouse gas emissions and air pollution.

4. *How do I improve my SIF score?*

Each SmartWay Partner is expected to improve its score over time. The most effective steps a trucker can take to improve fuel efficiency are:

- **Reduced idling.** A typical long-haul combination truck can save up to 1900 gallons of fuel each year by using auxiliary power units, automatic engine idle systems and truck stop electrification.
- **Lower speed.** Reducing highway speed by 5 mph can cut fuel use and greenhouse gas emissions by over 7%.
- **Better aerodynamics.** Aerodynamic drag (wind resistance) accounts for most truck energy losses at highway speeds. Reducing drag improves fuel efficiency. For example, cutting drag by 25% can improve fuel efficiency by up to 15%. Methods include use of fairings as well as cab extenders to minimize the gap between tractor and trailer.
- **Tires.** Specifying single wide-base tires on a new combination truck could result in fuel savings of 2% or more. Automatic tire inflation systems can save tire maintenance costs and improve fuel economy by 1%.
- **Low-friction lubricants.** Synthetic engine and drive train lubricants can improve fuel economy by about 3%.
- **Driver training.** Even highly experienced truck drivers can boost their skills and enhance driving performance through driver training programs. A few simple changes in driving techniques (e.g. cruise control, block-shift, progressive shift) can produce sizable fuel savings of 5% or more.

5. *How do I track my progress?*

By completing the Short Form in this application, a trucker establishes a performance baseline that can be used for later comparison. After each year, a SmartWay trucker is expected to complete and submit an updated Short Form. These annual updates allow progress to be tracked.

6. *What does the "Emissions Tons Saved per Year" mean?*

Based upon how many trucks you have and which attributes you select, you can calculate how much emissions you are saving each year as compared to a non-aerodynamic baseline truck that idles 8 hours per day. For example, if you have one truck and are idling less than 300 hours per year, you are not emitting 16 tons of CO<sub>2</sub> (Carbon Dioxide) and .288 tons of Particulate Matter and Nitrous Oxide gas per year.



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|     |                                   |  |  |                              |
|-----|-----------------------------------|--|--|------------------------------|
| 185 | Company:                          |  |  |                              |
| 186 | Total Number of Trucks:           |  |  | Total Miles Driven per Year: |
| 187 | Total Gallons Fuel Used per Year: |  |  | MPG:                         |

**Instructions:** ColumnB enter # Trucks that have the attributes listed in ColumnC  
 ColumnI equals ColumnB divided by Total Number of Trucks multiplied by ColumnH  
 ColumnF-CO2 equals ColumnB multiplied by ColumnD-CO2  
 ColumnG-PM/NOX equals ColumnB multiplied by ColumnE-PM/NOX

| 194 | ColumnB | ColumnC                                 | ColumnD | ColumnE                    | ColumnF | Column G  | ColumnH     | ColumnI |
|-----|---------|-----------------------------------------|---------|----------------------------|---------|-----------|-------------|---------|
| 195 |         | EMISSION BONUS POINTS                   |         |                            |         |           | 5.10        |         |
| 196 |         | Particulate Trap Installed (pre-2004)   |         |                            |         |           | 4.00        |         |
| 197 |         | Oxidation Catalyst Installed (pre-2004) |         |                            |         |           | 1.00        |         |
| 198 |         | ECM Reflashed (1994 - 1998 only trucks) |         |                            |         |           | 0.10        |         |
| 199 |         | Emission Tons Saved per Year            |         |                            |         |           |             |         |
| 200 |         | ENGINE IDLING - HRS PER YR              | CO2     | PM/NOX                     | CO2**   | PM/NOX*** | 1.45        |         |
| 201 |         | 300 Hours or less                       | 16      | 0.288                      |         |           | 1.45        |         |
| 202 |         | 301 hours to 599 hours                  | 13      | 0.236                      |         |           | 1.21        |         |
| 203 |         | 600 hours to 899 hours                  | 11      | 0.195                      |         |           | 0.96        |         |
| 204 |         | 900 hours to 1199 hours                 | 8       | 0.144                      |         |           | 0.71        |         |
| 205 |         | 1200 hours to 1500 hours                | 5       | 0.092                      |         |           | 0.47        |         |
| 206 |         | AERODYNAMICS                            |         |                            |         |           | 3.28        |         |
| 207 |         | Aero Profile Tractor                    | 8       |                            |         |           | 0.68        |         |
| 208 |         | Cab Over Engine                         | 11      |                            |         |           | 0.96        |         |
| 209 |         | Integrated Cab Roof Fairing             | 11      |                            |         |           | 0.96        |         |
| 210 |         | Cab Roof Fairing Add-on                 | 8       |                            |         |           | 0.76        |         |
| 211 |         | Cab Roof Deflector                      | 6       |                            |         |           | 0.56        |         |
| 212 |         | Cab Side Fairing                        | 2       |                            |         |           | 0.18        |         |
| 213 |         | Cab Front Air Dam Bumper                | 2       |                            |         |           | 0.18        |         |
| 214 |         | Cab Aerodynamic Mirrors                 | 1       |                            |         |           | 0.05        |         |
| 215 |         | Trailer Gap Less Than 44"               | 3       |                            |         |           | 0.28        |         |
| 216 |         | TIRES                                   |         |                            |         |           | 0.67        |         |
| 217 |         | Single-Wide                             | 6       |                            |         |           | 0.56        |         |
| 218 |         | Auto Inflation System                   | 1       |                            |         |           | 0.11        |         |
| 219 |         | LOW FRICTION LUBRICANTS                 |         |                            |         |           | 0.56        |         |
| 220 |         | Synth Engine Lubricants                 | 3       |                            |         |           | 0.28        |         |
| 221 |         | Synth DriveTrain Lubricants             | 3       |                            |         |           | 0.28        |         |
| 222 |         | AVERAGE SPEED                           |         |                            |         |           | 3.21        |         |
| 223 |         | Below 55 & Above 45                     | 36      |                            |         |           | 3.21        |         |
| 224 |         | 57                                      | 30      |                            |         |           | 2.72        |         |
| 225 |         | 59                                      | 25      |                            |         |           | 2.25        |         |
| 226 |         | 61                                      | 20      |                            |         |           | 1.80        |         |
| 227 |         | 63                                      | 15      |                            |         |           | 1.37        |         |
| 228 |         | 65                                      | 11      |                            |         |           | 0.96        |         |
| 229 |         | Above 65 & Less Than 70                 | 5       |                            |         |           | 0.50        |         |
| 230 |         | Emission Tons Saved Totals              |         |                            |         |           | Point Total |         |
| 231 |         | Column I Line 230 Point Total           | SIF     |                            |         |           |             |         |
| 232 |         | 0 - 3.99 =                              | 0.75    |                            |         |           |             |         |
| 233 |         | 4.00 - 4.94 =                           | 1.00    |                            |         |           |             |         |
| 234 |         | 4.95+ =                                 | 1.25    | Shipper Index Factor (SIF) |         |           |             |         |
| 235 |         |                                         |         |                            |         |           |             |         |
| 236 |         | Signature                               |         |                            |         |           | Date        |         |

**Cell:** C66  
**Comment:** Company:  
Enter official company name

**Cell:** C67  
**Comment:** Contact:  
Enter name of SmartWay contact

**Cell:** C68  
**Comment:** Address:  
Enter company address

**Cell:** C69  
**Comment:** City:  
Enter company state

**Cell:** F69  
**Comment:** State:  
Enter company state

**Cell:** I69  
**Comment:** ZIP:  
Enter company ZIP code

**Cell:** C70  
**Comment:** Phone:  
Enter SmartWay Contact phone number

**Cell:** F70  
**Comment:** FAX:  
Enter FAX number of SmartWay contact

**Cell:** C71  
**Comment:** SCAC:  
Enter Standard Carrier Alpha Code (SCAC) if known. The Standard Carrier Alpha Code (SCAC) is a unique two-to-four-letter code used to identify transportation companies. NMFTA assigns SCACs for all companies except those codes used for identification of freight containers not operating exclusively in North America, intermodal chassis and trailers, non-railroad owned rail cars, and railroads. To apply online go to <https://secure.nmfta.org/scacapp.htm>

**Cell:** F71  
**Comment:** E-Mail:  
Enter Email address of SmartWay contact

**Cell:** C104  
**Comment:** Signature:

**Cell:** G104  
**Comment:** Title:

**Cell:** C106  
**Comment:** Print Name:

**Cell:** G106  
**Comment:** Date:

**Cell:** D186  
**Comment:** Total Number of Trucks:  
Enter Number of Trucks between 1 and 20

**Cell:** I186

**Comment:** Total Miles Driven per Year:

**Cell:** D187

**Comment:** Total Gallons Fuel Used per Year:

**Cell:** I187

**Comment:** MPG is calculated:

Total Miles Driven per Year divided by Total Gallons Fuel Used per Year

**Cell:** B194

**Comment:** In Column B :

Enter number of trucks that have attributes listed in Column C

**Cell:** H194

**Comment:** ColumnH represents annual fuel savings in gallons divided by 1000 for 1 truck

**Cell:** I194

**Comment:** ColumnI is calculated:

ColumnB divided by CellD186(Total Number of Trucks) times ColumnH

**Cell:** C196

**Comment:** Diesel Particulate Filter: A Diesel Particulate Filter, sometimes called a DPF, is device designed to remove diesel particulate matter or soot from the exhaust gas of a diesel engine, most of which are rated at 85% efficiency, but often attaining efficiencies of over 90%. A diesel-powered vehicle with a filter installed will emit no visible smoke from its exhaust pipe.

**Cell:** C197

**Comment:** Oxidation Catalyst: The diesel oxidation catalyst (DOC) is effective for the control of carbon monoxide (CO), hydrocarbons (HC), odor causing compounds, and the soluble organic fraction (SOF) of particulate matter (PM10).

**Cell:** D199

**Comment:** Emission Tons Saved per Year is based upon an average engine idle time of 1920 hours per year

**Cell:** B200

**Comment:** If 1 Truck, choose 1 of lines 201, 202, 203, 204, 205

**Cell:** C200

**Comment:** For 1 Truck:

Pick one

For 1+ trucks:

Pick all that apply

**Cell:** D200

**Comment:** Carbon dioxide is a chemical compound composed of one carbon and two oxygen atoms. It is present in the Earth's atmosphere at a low concentration and acts as a greenhouse gas.

**Cell:** E200

**Comment:** Particulates, alternatively referred to as particulate matter (PM), aerosols or fine particles, are tiny particles of solid (a smoke) or liquid (an aerosol) suspended in a gas.

NOx is a generic term for the various nitrogen oxides produced during combustion. They are believed to aggravate asthmatic conditions, react with the oxygen in the air to produce ozone, which is also an irritant and eventually form nitric acid when dissolved in water.s

**Cell:** F200

**Comment:** CO2 is calculated:

ColumnB Number of Trucks times ColumnD CO2 tons saved

**Cell:** G200

**Comment:** PM/NOX is calculated:

Column B Number of Trucks times Column E PM/NOX Tons saved per year

**Cell:** C206

**Comment:** Choose all that apply:

**Cell:** B209

**Comment:** If 1 Truck, choose 1 of lines 209, 210, or 211.

**Cell:** B210

**Comment:** If 1 Truck, choose 1 of lines 209, 210, or 211.

**Cell:** B211

**Comment:** If 1 Truck, choose 1 of lines 209, 210, or 211.

**Cell:** C216

**Comment:** Choose all that apply:

**Cell:** C219

**Comment:** Choose all that apply:

**Cell:** B222

**Comment:** If 1 truck, enter 1 of line 223, 224, 225, 226, 227, 228, or 229.

**Cell:** C222

**Comment:** For 1 Truck:

Pick one

For 1+ trucks:

Pick all that apply

CO2 savings are compared to an average speed of 70 MPH

**Cell:** F230

**Comment:** Emission Tons Saved Totals CO2:

Calculated - Sum of F201 thru F229

**Cell:** G230

**Comment:** Emission Tons Saved Totals - PM/NOX:

Calculated - sum of G201 thru G205

**Cell:** I230

**Comment:** Point Total:

Calculated - sum of I201 thru I 229

**Cell:** D231

**Comment:** SIF: Shipper Index Factor. A number used by SmartWay Shipper partners to assess the fuel and emissions efficiency of their carriers. Score is posted on SmartWay web site.

**Cell:** I234

**Comment:** Shipper Index Factor is derived from Table on the left.