

EPA-designated “SmartWay” Refrigerated Trailers

EPA’s SmartWay Transport Program is a market-driven partnership to help businesses move goods in the cleanest, most efficient way possible. By providing a consistent set of tools and information needed to make informed transportation choices, SmartWay enables companies across the country to benchmark performance data in ways that protect our environment, encourage economic vitality, and enhance our nation’s energy security. EPA’s SmartWay Technology program helps carrier fleets make informed business decisions to save fuel and improve their supply chain efficiency.

This new program element is part of the 2015 SmartWay trailer program updates that include adding large refrigeration trailers and incorporating multiple aerodynamic performance evaluation tools.

EPA’s SmartWay Technology Program has expanded to include refrigerated trailers in its program to designate large, long-haul trailers to guide fleets toward trailers with demonstrated fuel savings.

What are EPA-designated “SmartWay” and “SmartWay Elite” refrigerated trailers?

- EPA-designated “SmartWay” refrigerated trailers are 53-foot refrigerated trailers used for the long haul operations that are equipped with SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices to achieve a total of 6% or more fuel savings over traditional refrigerated trailers. At least 5% or more of these fuel savings will come from reducing wind drag with aerodynamics verified by EPA.

Annual savings of about 1,000 gallons of diesel per tractor may be achieved when pulling a SmartWay-designated trailer (i.e., using verified aerodynamics and low-rolling resistance tires).

- EPA-designated “SmartWay Elite” refrigerated trailers meet the same specifications as SmartWay-designated refrigerated trailers but use combinations of aerodynamic devices to achieve 9% or more fuel savings from reduced wind drag.

A typical tractor using a SmartWay-designated Elite trailer (i.e., low-rolling resistance tires and Elite aerodynamics) could save about 1,700 gallons of diesel annually.

SmartWay-verified Technologies	SmartWay Trailer (53-foot box dry van or refrigerated trailer)	SmartWay Elite Trailer (53-foot box dry van or refrigerated trailer)
Tires	SmartWay-verified low-rolling resistance tires producing fuel savings of 1% or more	SmartWay-verified low-rolling resistance tires producing fuel savings of 1% or more
Aerodynamic Devices	SmartWay-verified component(s) producing fuel savings of 5% or more	SmartWay-verified component combination producing fuel savings of 9% or more
Combined benefits of Tires and Aerodynamic Devices	6% or greater	10% or greater

What are the differences in the effects of SmartWay-verified trailer aerodynamic devices on box dry van trailers versus refrigerated trailers?

EPA and other public research has indicated that much of the same aero-dynamic drag reductions seen by using SmartWay-verified aerodynamic devices also benefit refrigerated trailers. While aerodynamic devices fitted to the front of the trailer should

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not be used with a typical trailer refrigeration unit (TRU) installed on the trailer’s front, other aerodynamic components can provide significant fuel savings.

These trailer skirts, tails, under-trailer, and other devices are listed on the SmartWay website’s technology verification page (www.epa.gov/smartway/forpartners/technology.htm) if they demonstrate fuel savings using stringent SmartWay protocols.

What does the addition of refrigerated trailers to EPA’s designation program mean for fleet managers?

EPA’s designation of 53-foot box dry van and refrigerated trailers gives fleet managers additional confidence that fuel saving technologies will perform for all of their 53-foot box trailers.

For more information: www.epa.gov/smartway/forpartners/technology.htm or Tech_Center@epa.gov

