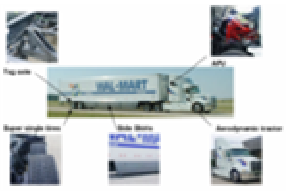
Wal-Mart Seeks to Double Truck Fuel Economy by 2015

15 December 2005



New Wal-Mart trucks

Wal-Mart has set a goal of doubling the fuel efficiency of its new heavy-duty trucks from 6.5 to 13 miles per gallon by 2015, thereby keeping some 26 billion pounds of carbon dioxide out of the air between now and 2020.

Wal-Mart has been working with the Rocky Mountain Institute to initiate a major two-pronged effort to address fossil fuel consumption in transportation and electrical end uses: the total redesign of the company's trucking fleet (one of the largest in the nation), and the retrofit and redesign of Wal-Mart retail stores and distribution centers for optimal electrical efficiency.

Beginning with the its 2007 model-year trucks, the company will begin introducing models with improved aerodynamics, transmission and tires, as well as an auxiliary power unit in every truck in its fleet.

Some of the changes include:

- Trailer Side Skirts. Wind skirts under the trailer significantly reduce wind resistance and reduces airflow around the trailer. This is a big fuel economy benefit.
- Super Single Tires. Wal-Mart combined the two wheels normally seen on a rear axle into a single wheel that is not quite as wide as the sum of two wheels. This gives a smoother ride and better fuel economy from the reduced surface area and improved tire wall stiffness.
- Aerodynamic tractor package. Making the tractor more aerodynamic radically reduces the fuel required to operate the

truck, as approximately two-thirds of all gallons burnt today by trucks can be attributed to overcoming aerodynamic resistance.

- Tag Axle. Reduced weight means increased efficiency. This type of rear axle reduces the weight of one rear axle as it eliminates internal axle drive train.
- Auxiliary Power Unit. This APU eliminates the use of the tractor's main engine for keeping our drivers warm or cool at night. Instead, this very small diesel engine does the job at optimum efficiency. This saves a substantial amount of fuel.

The company has estimated it will save some $52 million per year in fuel costs.

Wal-Mart also has more than 100 hybrids in operation its corporate light-duty vehicle fleet, and is planning to acquire 100 more in 2007.
