

Summary

FedEx Express, Environmental Defense and Eaton Corporation have introduced an environmentally superior delivery truck that could become a standard medium-duty delivery truck in the FedEx Express fleet. This project demonstrates that hybrid technology is real and has the potential to become an industry standard. By being the first company to make a long-term market commitment to hybrid electric delivery trucks, FedEx Express has demonstrated that good environmental sense makes good business sense.

Project Goals

The main goal of the project is to develop a delivery truck that significantly decreases particulate emissions, smog causing emissions (nitrogen oxides) and increases fuel economy. The project also expects to prove that significant environmental benefits are economically and functionally viable for FedEx Express vehicles, and to accelerate the commercialization of environmentally preferable trucks.

Benefits of the New Truck

The new trucks will generate significant environmental benefits, increasing fuel efficiency by 57%, decrease particulate emissions by 96% and reduce smog causing emissions by 65%. They will be virtually indistinguishable to the driver in terms of utility and performance. The environmental benefits of the hybrid trucks add up quickly. For example, for every 10,000 new hybrid trucks on the road:

- smog-causing emissions of nitrogen oxides would be reduced by 1,700 tons annually, the equivalent of taking passenger cars off New York City roads for 25 days;
- soot (particulate) emissions would be reduced by 62,000 pounds annually, or about the amount emitted from 300,000 campfires;
- carbon dioxide emissions would be reduced by 83,000 tons annually, which is equivalent to planting 2 million trees each year;
- diesel fuel usage would be reduced by 7.2 million gallons annually, which requires 1 million barrels of crude oil.

Timeline

- August 2000** FedEx Express and Environmental Defense agree to create the next generation of cleaner, more fuel-efficient delivery trucks.
- February 2001** Environmental Defense and FedEx Express invite manufacturers to submit proposals for the design and development of a delivery truck of the future.
- February 2002** Three companies are selected from over 20 suppliers to produce a prototype vehicle of the next generation of FedEx Express delivery trucks.
- November 2002** Prototype hybrid electric trucks are tested for performance at Southwest Research Institute.
- May 2003** FedEx Express agrees to purchase 20 hybrid electric diesel delivery trucks using Eaton's innovative hybrid electric technology.
- March 2004** The first two pre-production vehicles are placed into service in Sacramento, CA.
- October 2004** FedEx, Eaton and Environmental Defense roll-out 10 hybrid electric diesel delivery trucks in New York City**

** (FedEx Express will place the additional 6 hybrid electric diesel delivery trucks into service in selected cities in the next few months).