

Financial Incentives for Hybrid Trucks in Florida Environmental Defense - September 2007

Environmental Defense has been working since 2000 to put cleaner, more fuel efficient trucks on the road. Our partnership with FedEx (www.environmentaldefense.org/go/fedex) developed a delivery truck that travels 50% farther on a gallon of fuel, and cuts NOx emissions by 75% and particulate emissions by 95%. This was a technology-neutral project from the start: we set performance-based goals and let the best technology - in this case a hybrid-electric truck - win.

Today, there are about 250 hybrid trucks on the road in North America, including purchases by FedEx, UPS, Coca-Cola, PepsiCo/Frito-Lay, Purolator Courier, and a dozen U.S. utilities. But the main thing preventing these and other fleets from ordering more is cost, which because production volumes are still low, is still between 50-100% higher than that of a standard truck. Until production reaches scale, financial incentives are critical in helping fleets offset upfront costs, and realizing the full environmental benefits of this technology.

Environmental Defense is working to raise awareness of and access to existing incentive programs for hybrids (www.environmentaldefense.org/hybridincentives), and to expand incentive programs at the state and federal level. The most robust program right now is New York's, which contributes to qualifying fleets up to 80% of the incremental cost of hybrid trucks placed in the New York City area. We are doing this because of the immediate environmental benefits to be gained from replacing a standard truck with a hybrid truck.

Benefits of hybrid trucks

- Hybrids offer an immediate solution for reducing petroleum use and greenhouse gas emissions. Fuel economy gains of up to 30-50% are possible now.
- Hybrids electric technology has achieved significant market penetration in passenger cars, but progress has been slower in the medium- and heavy-duty truck sector. Trucks are an ideal application for hybrid technology, given their frequent stopping and starting, and their large contribution to pollution and greenhouse gas emissions. Furthermore, hybrid trucks can draw power from the electric battery to run onboard equipment, thereby reducing idling.
- Hybrids are a proven technology that can deliver significant air quality and climate benefits today. They do not require a new infrastructure to be built; they do not need further study to determine their true environmental impact. That's all been measured and demonstrated. All they need is some financial support to make them more affordable in the short term, until production reaches scale and incremental costs are offset by fuel economy gains.

- Hybrids play an important role in a portfolio of clean vehicle solutions, whose benefits accrue over time. They are an *enabling* technology to even more advanced solutions in the future.

Funding Options - Rationale

- Establish funding as a Grant rather than a tax benefit.
To encourage participation by State, County and Municipal fleets that would be excluded from a tax benefit based program.
- Grant funding should be established as a percentage of the investment.
Funding that is commensurate with the investment cost would encourage investment in the medium/heavy duty truck segment.
(example - \$95,000 chassis X 20% grant assistance = \$19,000 buy-down funding)
- Grant funding should be fuel agnostic.
Funding should enable fleets to use multiple solutions to gain;
 - Reductions in total fuel burn
 - Reductions in greenhouse gas
 - Reductions in total emissions(Example - diesel/electric hybrid truck burning B20 would result in a 70% reduction in fuel burned)
- Grant Funding should be established on a "sliding" scale;
 - First 2000 units receive 20% funding assistance
 - Next 2000 units receive 15% funding assistance
 - Next 2000 units receive 10% funding assistance
 - Next 2000 units receive 5% funding assistanceFunding would sunset after 8000 units have been purchased and placed in service.

Submitted to the Action Team by: Jerry Karnas, Florida Climate Project Director