Report confirms cleaner, fuel efficient freight trucks yield big savings over the long haul

President Obama has tasked the National Highway Traffic Safety Administration (NHTSA) and the U.S. Environmental Protection Agency (EPA) with establishing target fuel efficiency and greenhouse gas (GHG) emission standards for medium- and heavy-duty trucks. The proposed standards will be announced in March of 2015, and the stringency of the standards is currently under consideration. A new report by Ceres and the Environmental Defense Fund (EDF) finds that bold standards that cut new heavy truck fuel consumption by 40% compared to 2010 levels would deliver significant environmental and economic benefits. The report concludes that American businesses stand to save billions of dollars under strong standards.

**Background**

Heavy trucks move 70% of U.S. freight, consuming nearly 2.5 million barrels of oil per day, and producing nearly half-a-billion tons of carbon pollution a year. By 2040, carbon pollution from this sector is projected to increase by another 40%. Strong fuel efficiency and GHG standards will dramatically reduce these emissions.

In 2011, the first ever fuel efficiency and GHG standards for medium- and heavy-duty trucks were adopted. The standards cover trucks manufactured between 2014 and 2018. While a good first step, the current standards don't take advantage of many cost-effective technologies that have been identified by the National Research Council and demonstrated through the Department of Energy's Super Truck program. In 2014, NHTSA and EPA began developing Phase 2 fuel efficiency and GHG standards for heavy-duty trucks for 2019 and beyond.

Ceres, EDF and other leading environmental organizations are advocating for bold standards that take advantage of existing and emerging technologies. Tractor-trailer trucks, which can travel more than 120,000 miles a year, are particularly well positioned for significant improvements in fuel efficiency. Today, these trucks average 6 MPG. By 2025, new tractor-trailer units could cost-effectively achieve nearly 11 MPG under normal operating conditions.

Ceres and EDF commissioned independent consultant M.J. Bradley & Associates to examine the financial impact of bold Phase 2 standards on the cost to operate tractor-trailer...
trucks. The full analysis is available at: www.ceres.org/trucksavings

**Report Findings**
M.J. Bradley & Associates compared the cost of operating a truck under the current standards with the cost of truck operation under a bolder standard that assumes a target for new tractor trailer units of nearly 11 miles per gallon in 2025. The analysis found a bolder standard would:

1. Drive fleet average net savings of $0.21 per mile by 2040.

2. Save sleeper truck operators $21,000-$36,000 during the first year the new truck is in service. A new day cab and trailer would realize $3,500-$6,900 in net savings the first year.

3. Lower the per-mile cost of heavy truck operation by 3% in 2030 and 7% in 2040, compared to the cost of operation under the existing standards.

These savings will accrue directly to trucking fleets and some portion will likely be passed on to retailers, manufacturers and other companies that purchase trucking services.

Trucks could meet strong standards by adopting a suite of existing and emerging fuel-saving technologies, including improved aerodynamics for tractors and trailers, automated manual transmissions, engine improvements and the use of waste-heat recovery, and the electrification of accessories.

**Conclusion**
Strong fuel efficiency and GHG standards for our nation’s heavy trucks are critical to reducing GHG emissions and freight costs. Stringent standards that cut new heavy truck fuel consumption by 40% compared to 2010 levels will enable companies to continue to use trucks to get products to market, while also reducing emissions, fuel use and costs. A $0.21 per mile savings, for example, has an annual savings potential in excess of $25 billion given that class 8 trucks in the US logged 120 billion miles in 2013.

EDF and Ceres are calling on companies that use trucking services to publicly support strong truck efficiency and GHG standards. As our analysis shows, these standards will reduce the per-mile cost of moving freight by truck, providing a significant financial benefit to shippers across the board while also meaningfully reducing GHG emissions.

**For information on how your company can show its support for strong truck efficiency and greenhouse gas standards, contact:**
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Environmental Defense Fund (edf.org), a leading national nonprofit organization, creates transformational solutions to the most serious environmental problems. EDF links science, economics, law and innovative private-sector partnerships.

Ceres is an advocate for sustainability leadership. Ceres mobilizes a powerful coalition of investors, companies and public interest groups to accelerate and expand the adoption of sustainable business practices and solutions to build a healthy global economy. For more information, visit www.ceres.org.