New Policy

Federal Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Vehicles

Policy summary: The EPA and the DOT have announced complementary programs to reduce GHG emissions and improve fuel efficiency, respectively, for medium- and heavy-duty vehicles, such as the largest pickup trucks and vans, combination tractors[47], and all types and size of work trucks and buses in between, for model years 2014-2018.

Economy-wide GHG emissions reduced in 2020	0.3 million metric tons; 0.3%
Motor fuel savings in 2020[48]	$140 million per year
Cumulative net benefits (discounted) 2011-lifetime of vehicles	$240 million
Jobs gained in 2020 (direct and indirect)	1,000 jobs

Clean energy economy impacts: Using commercially available technologies, a payback period of one to two years is estimated for the majority of vehicles. Vehicles with lower annual miles would have payback periods of four to five years. For example, an operator of a semi truck could pay for the technology upgrades in under a year, and have net savings up to $74,000 over the truck's useful life.[49] Large reductions in fuel use will improve air quality. Less spending on imported fuel will keep more money in the Massachusetts economy and thereby create jobs.

Rationale: Transportation is projected to account for close to 40 percent of total GHG emissions in Massachusetts in 2020, and medium- and heavy-duty vehicles are projected to account for 13 percent of transportation sector emissions. These vehicle standards will reduce fuel consumption and GHG emissions while providing regulatory certainty for manufacturers.

GHG impact: 0.34 percent of statewide GHG emissions in 2020, based on a reduction of 6.4 percent in emissions from medium- and heavy-duty vehicles.

Equity issues: The federal regulations are carefully designed to set efficiency standards that are appropriate and cost-effective for different sizes and types of vehicles. There are no significant predicted equity issues with the promulgation of this federal regulation.

Uncertainty: Current projections of the impact of these standards by the EPA and NHTSA may not turn out to be correct, in terms of fuel savings and costs and benefits, as the regulation is not final. In addition, if manufacturers cannot meet the standard and pay penalties instead, then GHG and fuel consumption targets will not be met.

[47] Also known as semi trucks that typically pull trailers.

[48] At $3.34/gallon gasoline, $3.51/gallon diesel, in 2008$. Energy Information Administration, Annual Energy Outlook 2010.

[49] "EPA and NHTSA Propose First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles: Regulatory Announcement," Report No. EPA-420-F-10-901, October 2010.