



Research

What Does Carbon Cost? Inside EPA's MPG Requirements

SAM BATKINS | AUGUST 16, 2011

Last week EPA proposed strict fuel performance standards for trucks, taking another step toward broader greenhouse gas regulation. In its press release and fact sheet, [EPA lavished praise](#) on its regulatory agenda, touting the benefits to consumers of lower prices, but saying nothing of the new costs for manufacturers or the unintended consequences of a sweeping new regulatory regime.

Since the rule isn't in the Federal Register yet, the public can only judge EPA's lengthy Regulatory Impact Analysis (RIA). The highlights:

- 552-Pages
- 20 Percent Reduction in Fuel Consumption for Big Rigs
- Costs: \$8.1 Billion
- Employment Impact: Undetermined
- Possible Unintended Consequences:
 - "Increased traffic congestion, motor vehicle accidents, and highway noise."
 - "Global increase in emissions."

EPA's discussion of the "cost of carbon," is perhaps more interesting than the top-line numbers.

"We assigned a dollar value to reductions in carbon dioxide (CO₂) emissions using recent estimates of the 'social cost of carbon' (SCC). The SCC is an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year. It is intended to include (but is not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services due to climate change."

The result of these myriad factors is a huge range for the actual or probable cost of carbon. EPA's guesses: \$5, \$22, \$36, or \$67 per metric ton of CO₂ emissions. The Agency expects the cost of carbon to increase gradually "because future emissions are expected to produce larger incremental damages as physical and economic systems become more stressed in response to greater climate change."

As for the other more concrete costs, the costs businesses must bear to comply with the rule:

- Manufacturer's hardware price increases will average \$6,039 per year per truck, for the first five years.
- The [ubiquitous pickup truck](#) will carry an additional \$500 per year per vehicle cost.
- This equates to roughly \$63,000 in increased costs per manufacturer per year until 2018.

EPA admits, “The costs are higher in the first year due to capital expenses required to comply with new reporting burdens (facility upgrade costs are included in engineering costs....)”

So what is the long-term cost of the rule? EPA’s “executive summary” cost estimate projected \$8.1 billion in new burdens but their “Annual Costs Associated with the Program” chart projects \$47.3 billion in compliance and engineering costs. This figure is the net present value at a three percent discount rate during the life of the program.

Strangely, EPA didn’t tout \$47 billion in new costs in its press release or executive summary.

This is the first of many moves in EPA’s greenhouse gas agenda. The Agency has already released a [notice](#) to hike [MPG requirements](#) for light-duty vehicles. Of course, \$47 billion in new costs is a pittance compared to the next step: regulating all major sources of carbon.