FUEL EFFICIENCY IS NOT A SOLUTION FOR GLOBAL WARMING

by Claude D. Convisser

Conventional wisdom holds that government-mandated improvements in fuel economy, the cornerstone of the U.S. Environmental Protection Agency's and Department of Transportation's Greenhouse Gas Standards for trucks and cars published last fall, are "low-hanging fruit" that will help us to contain Global Warming. Close examination, though, raises serious doubts, which these federal agencies and the U.S. Court of Appeals for the D.C. Circuit must now confront and resolve in their pending reviews of these Standards.

The notion that better fuel efficiency will reduce energy consumption and, therefore, greenhouse gas emissions makes sense at first blush: with improved fuel economy, it takes less fuel to travel the same distance in the same-sized vehicle. Even EPA and DOT, though, recognize the existence of a rebound effect: better fuel economy leads consumers to drive more miles, offsetting some of these efficiency gains.

Moreover, as Detroit has known for decades, improved fuel efficiency makes it less expensive to drive bigger vehicles. As a result, consumers flock to them in larger numbers, as Alan Batey, head of marketing for Chevrolet, told to the Wall Street Journal recently. 12/2/11, page 1. Witness the glut of SUV's and pick-up trucks that now comprise more than half of passenger vehicles sold in the United States. This shift further negates energy savings.

The federal agencies overlook broader implications of the rebound effect, known to economists as the Jevons paradox for the Nineteenth Century Englishman who first observed it. Tighter fuel standards for commercial trucks spur greater demand for commercial road haulage. A restaurant in Atlanta finds it cheaper to buy more fruit from California, rather than local varieties, because trucking costs dropped. Businesses, facing cheaper transportation, can invest in new product lines that consumers readily snap up, such as electronic devices, which embody energy in their manufacture and consume energy in their use.

A landmark analysis by Dr. Harry Saunders of the Breakthrough Institute concludes that the Greenhouse Gas Standards for trucks will lead, across the economy, to the consumption of *more* energy and the consequent emission of *more* carbon dioxide than would arise without the government-ordered improvements in fuel economy. Available at www.popdiesel.com/DrSaundersAnalysis.pdf. The parallel Standards for cars yield a result that is nearly as counter-productive.

It is hard to argue against consumer choice and economic progress. The urgent question, though, is how to reduce greenhouse gas emissions from on-road vehicles. Simply, EPA needs to decouple Greenhouse Gas Standards from fuel economy requirements, reward the most promising technologies and fuels, and penalize fossil fuels.

So far, these Standards count only tailpipe emissions, rather than rank the total emissions of each fuel and technology according to all the energy invested in its complete life cycle. Electric vehicles, the big winners of this tailpipe myopia, merely transfer emissions upstream to

power plants that, more likely than not, run on coal. According to the U.S. Energy Information Administration, coal produces 25 to 50 percent more carbon emissions than petroleum per unit of energy. www.eia.gov/energy_in_brief/role_coal_us.cfm.

In contrast, the use of 100 percent straight vegetable oil in a diesel engine that is properly equipped makes the lowest possible net contribution of greenhouse gasses to the atmosphere. The Greenhouse Gas Standards completely ignore this technologically feasible solution.

Wake up. Anchoring our anti-Global Warming strategy on fuel efficiency and tailpipe emissions is a misguided fallacy. Let's take a hard look at all the energy inputs required for various fuels and technologies and favor the best ones over the rest. If we make the right regulatory choices now, the free market will adapt, preserving for us our abundance and our children, their future.

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