

“Technology and the Tailpipe”

Transportation and Highways Policy Brief

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At the start of the 21st Century we are now aggressively counting our environmental impacts. Any person can go online and calculate how much pollution they are emitting into the air. And governments (Federal, State, and Local) as well as many private companies (voluntarily through participation in the Chicago Climate Exchange, EPA Climate Leaders, and other programs) are also calculating environmental impacts.

This is a positive development for both the U.S. and the world. If we know what is polluting, we, as individuals (and business-by-business), can figure out ways to make changes that can reduce pollution, use energy more efficiently, and create healthier air and cleaner water. This is not a new development. It's just that now we have a lot more data to make many simultaneous improvements.

On the national level, the EPA publishes an annual Greenhouse Gas Inventory, which the EPA has been calculating since 1990. The EPA GHG Inventory is a birds-eye view of the entire economy. This is where we get statistics such as 30% of U.S. emissions are from transportation, and 18% of emissions are from vehicles. To date, the spontaneous reaction has been that if vehicles are causing pollution, we need to reduce driving. I am trying to convey a new perspective on the matter of driving and the environment.

Driving does not cause emissions. **Tailpipes cause emissions.**

It is important to protect our air, water, and natural environment. And, I am convinced—**by data**—that the best way to do this is via technology improvements. And my convictions are made stronger when I consider that technology enables continuation of the freedoms and liberties of people to form businesses where they want; live where they want; and travel wherever they want, whenever they desire. Yes, it is quite a liberal vision. Simultaneous to this technology-based, freedom, pro-growth policy track, developers can present new options. It is fantastic if we can create “better” “more livable” “smart” communities that people enjoy, and want to live in and work in.

Technology solutions to address tailpipe emissions have a far broader (from New York City to New Delhi), and deeper (all future cars), impact than a new subway line, or smart growth development. A 50%, or 80%, reduction in tailpipe emissions is a reduction in emissions of 50% minus the growth rate of VMT. At VMT growth of less than 2.2% a year, the magnitude of change via a focus on technology (not demand) is much greater.

Basically, we are not going to reduce driving 80%
yet we can **reduce emissions from driving** 80%.

Drivers are not polluting; tailpipes are. And the most direct, largest impact to reduce emissions is, without question, focusing on **technology and the tailpipe.**