

Higher gas prices help reduce emissions

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(PhysOrg.com) -- Less driving and greater vehicle fuel economy aren't the only byproducts of higher gas prices—lower carbon dioxide emissions is another benefit, say University of Michigan researchers.

In a new study, Michael Sivak and Brandon Schoettle of the U-M Transportation Research Institute found that <u>carbon dioxide</u> emissions per driver from purchased new vehicles were lower in each month from November 2007 to April 2009 when compared to October 2007. The greatest reduction—12 percent—was achieved in July 2008. The reduction in April 2009 was 8 percent.

The cause? Improved fuel economy (from 20.2 mpg in October 2007 to 21.3 in April 2009) and a decrease in distance driven by U.S. motorists (a 3 percent drop in April 2009 compared to October 2007), the researchers say.

"Recent economic upheavals have influenced the fuel economy of new vehicles that Americans purchase and how much they drive," said Sivak, research professor and head of UMTRI's Human Factors Division. "By itself, the decrease in the amount of driving for the entire fleet of vehicles has resulted in a 3 percent reduction in <u>carbon dioxide</u> emissions per driver in April 2009—the latest month examined—when compared to October 2007. Furthermore, because buyers of new vehicles have tended to purchase more fuel-efficient vehicles, their contribution to the decrease in carbon dioxide emissions has been even greater."



In prior research, Sivak and Schoettle found that since late 2007, average fuel economy of new vehicles purchased has increased substantially. Their analysis used monthly data from October 2007—the conventional starting month of the 2008 model year—through April 2009—the latest month for which the data were available.

Beginning in January 2008, fuel economy in each month was better than in the comparison month of October 2007, reaching the best level (a 7 percent improvement) in May 2008. The fuel economy in April 2009 showed an improvement of 5 percent.

In addition to lower emissions and better <u>fuel economy</u>, the researchers found that beginning in February 2008, the distance driven in each month was lower than in the comparison month of October 2007. The greatest reduction (7 percent) came in September 2008, while April 2009 showed a 3 percent decline.

More information: deepblue.lib.umich.edu/bitstre 2/63100/1/102303.pdf

Provided by University of Michigan (<u>news</u> : <u>web</u>)

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