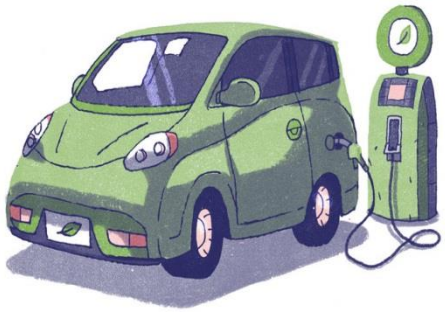
NYT Sunday Review | Opinion What You Can Do About Climate Change

By MICHAEL SIVAK and BRANDON SCHOETTLE MARCH 25, 2017



Credit Tim Peacock

ANN ARBOR, Mich. — What can you — just one concerned person — do about global warming?

It may feel like a more urgent problem these days, with proposed cuts to the Environmental Protection Agency and each year warmer than the previous one.

You could drive a few miles fewer a year. Reduce your speed. Turn down your thermostat in winter. Replace your incandescent light bulbs with LEDs. Reduce your meat consumption. Any one of those actions would help.

But none would come close to doing as much as driving a fuel-efficient vehicle. If vehicles averaged 31 miles per gallon, according to our research, the United States could reduce its carbon dioxide emissions by 5 percent.

Improving fuel economy carries particular salience after the Trump administration announced this month that it would re-examine the progressively more stringent Obama-era fuel economy standards for vehicles in model years 2022 to 2025.

The Most Efficient Way to Help the Planet

If every household collectively took these 11 actions — changes not likely to upend the typical American lifestyle — they would **reduce emissions by 2.2 percent (0.2 percent each)**, far less than driving highly fuel efficient cars.

Transportation

If every American household drove a vehicle getting 56 miles per gallon, it would **reduce U.S. emissions by 10 percent.**

The American new-vehicle fleet now averages less than half that. It is expected to average 36 m.p.g. in 2025 if Obama administration standards remain in place, according to the Environmental Protection Agency.

• Reduce the distance you drive by 1.2 percent. That's the equivalent of about 13 miles a month for the average American driver, who logs roughly 13,000 miles a year.

• Replace a vehicle getting the current average of 21.4 m.p.g. with one that gets 21.7 m.p.g.

• Keep your tires inflated to the recommended air pressure, or buy new tires marketed to have better rolling resistance.

• Reduce your driving over 70 m.p.h. by 25 percent.

• Reduce aggressive driving — making hard starts and stops, and speeding far above posted limits — by 25 percent.

• Fly 10 percent less.

• Turn down thermostat by three degrees, eight hours a day in winter.

• Replace one of every five incandescent light bulbs with LEDs.

FOOD

• Reduce food consumption by 2 percent, roughly 48 fewer calories for many people. A miniature box of raisins is 42 calories.

• Reduce meat consumption by 7 percent — about a pound a month for some adults.

• Cut the amount of discarded food by 13 percent. This could be about three meals a week from leftovers that would have been thrown away.

The simple fact is that American drivers are a significant contributor to greenhouse gas pollution, so having a vehicle fleet that burns less fuel can have an outsize impact on total emissions.

Though the United States has just 4 percent of the world's population, it is responsible for 14 percent of man-made greenhouse gases that end up in the atmosphere. Transportation accounts for 27 percent of those emissions. And 60 percent result from driving personal vehicles.

Over two years, the average American driver travels a distance equal to the circumference of the earth. The average new vehicle gets only about 25 miles per gallon, which corresponds to about three-quarters of a pound of greenhouse gas emissions for each mile driven. Each year in the United States, 214 million drivers (with 240 million registered vehicles) drive 2.7 trillion miles, emitting about 2.4 trillion pounds of carbon dioxide into the atmosphere, based on the current fleet average of 21.4 m.p.g.

Changing how much we drive is not easy; it often requires a major change in lifestyle, like moving closer to work or making more frequent use of public transportation, which often takes longer and is less convenient than driving. It is much easier to buy a more fuel-efficient vehicle; cars with fuel economy much better than the new-vehicle average of 25 m.p.g. are widely available.

As our monthly monitoring of vehicle fuel economy shows, the average for new vehicles has increased to about 25 m.p.g. for model year 2014 from about 21 m.p.g. for model year 2008. Notably, however, the fuel economy of model years 2015 and 2016 vehicles did not improve.

The main reason was the drop in the price of gasoline to $2.14 in 2016 from $3.36 a gallon in 2014. Now, fueling a less fuel-efficient but more spacious vehicle like an S.U.V. or pickup truck costs no more than fueling a small sedan did a few years ago. And buyers have responded by buying more of those bigger, less fuel-efficient vehicles.

This is where the role of government and its fuel-economy standards for new vehicles becomes important.

These standards have obvious direct effects on the industry in terms of what vehicles are made and sold, and their actual on-road fuel-economy performance.

Significant increases in fuel-economy standards for all vehicles, but especially for pickups and S.U.V.s, are even more important when relatively low gas prices motivate buyers to choose larger vehicles over smaller ones.

One of the last important acts of the Obama administration was to reaffirm the more stringent fuel-economy standards for model year 2022-25 vehicles, benchmarks that were originally proposed in 2012. Those standards would have ensured that the improvements in fuel economy that have stalled in recent years would resume.

But the recently announced review of those standards by the Trump administration is bad news for the prospects of reducing both transportation emissions and the country's reliance on fossil fuels. And that will make it that much harder to reduce the greenhouse gas emissions that are warming the planet to dangerous levels.

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