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How Americans are – and aren’t – making eco-friendly lifestyle changes

BY DREW DESILVER

Nearly three-quarters of Americans see global climate change as a “very serious” (45%) or “somewhat serious” (29%) threat, and two-thirds (66%) say people will have to make major changes in the way they live to reduce the effects of climate change, according to a [Pew Research Center report](#) released earlier this month.

People have received all sorts of advice over the past few decades about how to reduce their climate impact – from driving less to recycling more to insulating their homes. Actual changes in behavior, though, have been very much a mixed bag.

Using the Environmental Protection Agency’s [climate change website](#) for suggestions on ways people can reduce greenhouse gas emissions, we analyzed available data to gauge the extent to which Americans are heeding advice on living more climate-friendly lives. Among the indicators we looked at, actual changes ranged from significant to minimal to nonexistent. Here’s what we learned:

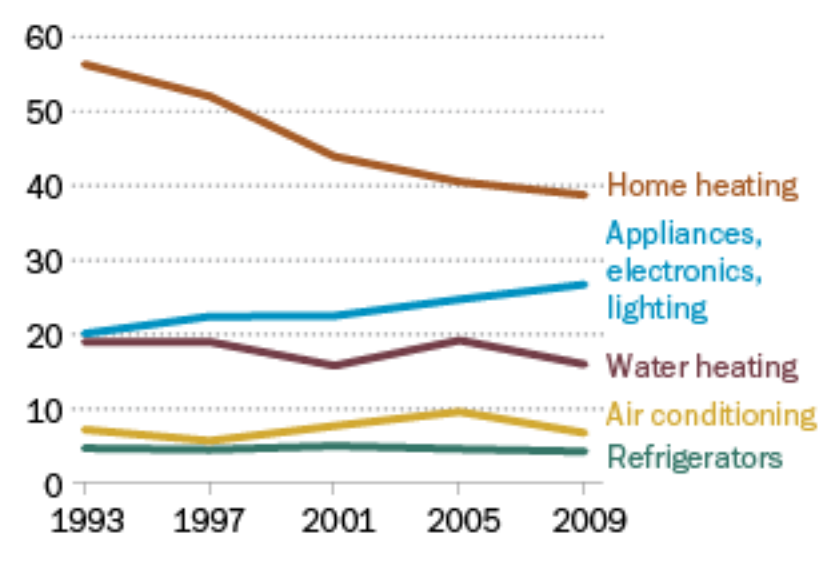
Cars and driving:

One of the EPA’s top recommendations is to “purchase a fuel-efficient, low-greenhouse gas vehicle.” Overall fuel economy has, in fact, improved: The sales-weighted average for new vehicles was 25 miles per gallon last month, up from 20.1 mpg in October 2007, according to research by the University of Michigan’s [Transportation Research Institute](#). But average fuel economy has been mostly flat for the past three years, in contrast to steady growth in the late 2000s and early 2010s.

And American drivers are showing few signs of shifting away from fossil fuels. Fewer than 3% of the cars, SUVs, pickups and other “light-duty” vehicles sold through October of this year ran on anything other than gasoline or diesel – an even smaller market share for alternative-fueled vehicles than in 2013 or 2014, according to data from the [National Automobile Dealers Association](#).

U.S. Homes Using Less Energy for Heat, More for Gadgets

Average annual use in million Btu, per household using each end use



Note: A Btu, or British thermal unit, is the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit.
Source: US Energy Information Administration, Residential Energy Consumption Survey (1993-2009)

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95% of New U.S. Cars Still Run on Gas

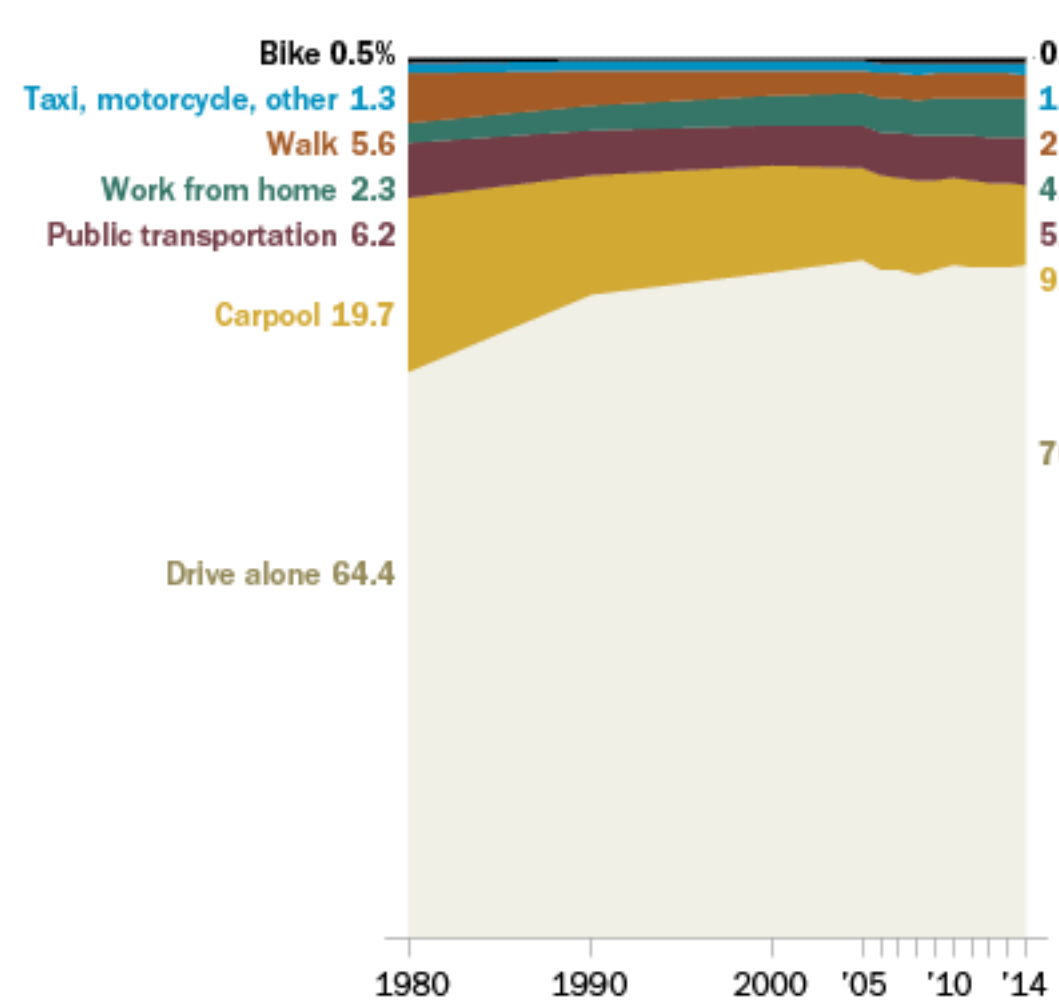
Share of total vehicle sales, by power source

	2013	2014	2015
Gasoline	93.3%	93.5%	94.6%
Diesel	2.9	3.0	2.5
Hybrid	3.2	2.8	2.2
Electric	0.3	0.4	0.4
Plug-in hybrid	0.3	0.3	0.2

Note: 2015 figures as of Oct. 2015. Vehicles powered by natural gas, fuel cells and other alternative technologies account for less than one-tenth of 1% of total sales.
Source: National Automobile Dealers Association, “Market Beat” reports

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How Americans Get to Work



Note: Data represent method used to cover greatest distance of daily commute. Source: Census Bureau, decennial censuses 1980, 1990 and 2000; American Community Survey (Table S0801) 2005-2014

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The percentage of commuters who carpool has fallen by more than half, from 19.7% in 1980 to 9.2%

last year. Also, a modest increase in telecommuting hasn’t been enough to make solo driving any less dominant.

Americans are, however, driving less than they used to. Based on our analysis of Federal Highway Administration data on [licensed drivers](#) and total [vehicle miles traveled](#), the average driver drove just over 14,000 miles in 2013 – more than he or she did in 1989 (12,700) but slightly less than in the peak years of 2004-05 (14,900). In recent years, the licensed-driver share of the population has edged lower: to 84.6% of Americans aged 16 and over in 2013, after peaking at 88.9% in 1999.

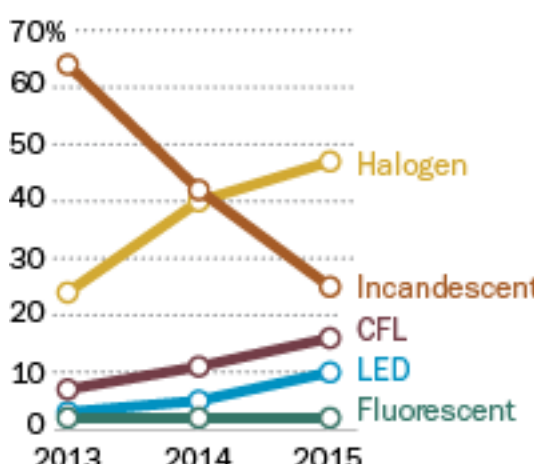
In the home:

One of the most dramatic shifts in recent years has been the rapid decline of the once-ubiquitous incandescent light bulb. Since the [phase-out of standard incandescent bulbs](#) began in 2012, their share of the residential light-bulb market has fallen dramatically: just 25% of total shipments so far this year, down from nearly two-thirds just two years ago, according to market-research firm IHS. Instead, people are buying more [energy-efficient and longer-lasting alternatives](#), such as halogen and LED bulbs.

The light-bulb switch is mandated by law, but the government also is encouraging Americans to voluntarily [use energy more efficiently at home](#). Although the most recent [Residential Energy Consumption Survey](#) was conducted back in 2009 (the Energy Information Administration has begun collecting 2015 data and expects to begin posting results sometime next year), some trends were apparent even then. The average household used nearly a [third less energy for heating their home](#) in 2009 than in 1993, and 16% less for water heating, while use levels for air conditioning and refrigerators stayed roughly the same. But energy used for other appliances, electronics and lighting climbed steadily, rising by about a third between 1993 and 2009.

A Shift Away From Standard Light Bulbs

Share of annual residential light-bulb shipments, North America



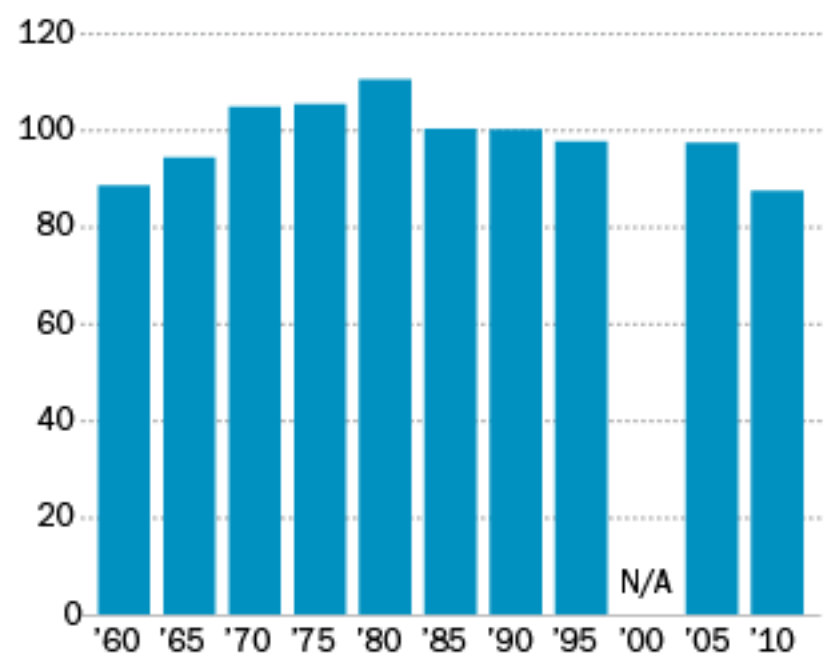
Note: LED = light-emitting diode; CFL=compact fluorescent
Source: IHS Technology

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Americans also are using less water in their homes, which indirectly addresses climate change. (As the EPA notes, “It takes lots of energy to pump, treat, and heat water, so saving water reduces greenhouse gas emissions.”) According to our analysis of data from the [U.S. Geological Survey](#), average residential water use was 87.5 gallons per person per day in 2010 (the latest year for which data are available). That’s nearly 21% below the average use figure for 1980, the peak year.

U.S. Residential Water Use Lower

Gallons per day per person, from public and private supplies



Note: Estimates for domestic water use from public supplies were not made in 2000.
Source: US Geological Survey, “Estimated Use of Water in the United States in 2010” (and prior reports in series);
Pew Research Center analysis

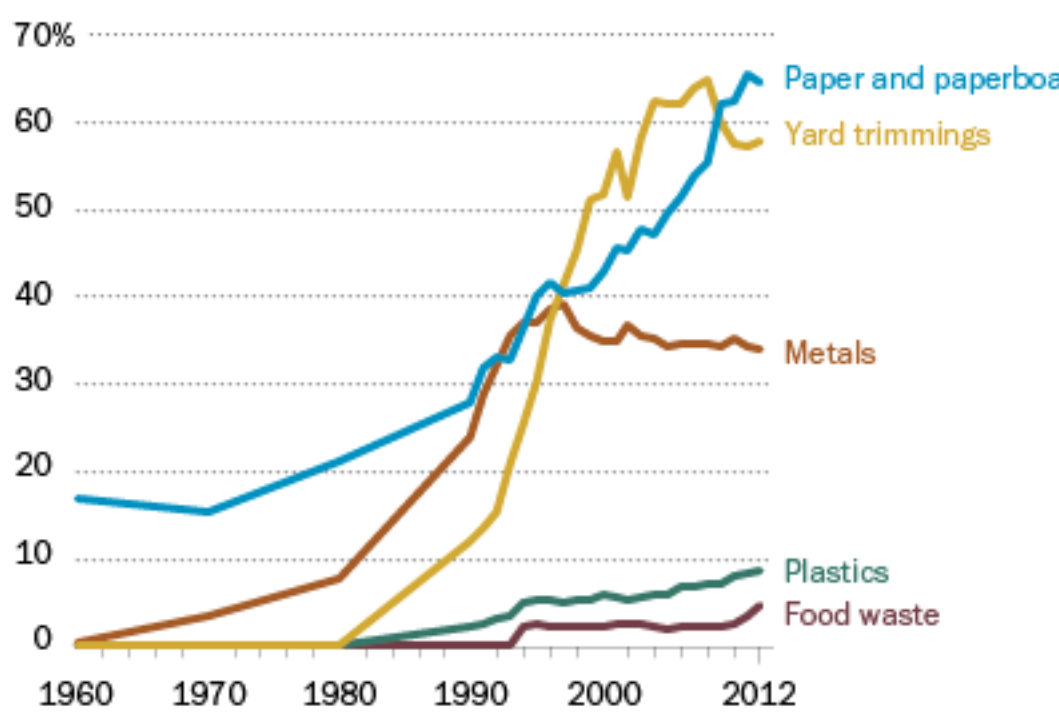
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Taking out the trash:

The EPA encourages people to “reduce, reuse and recycle,” noting that doing so “helps conserve energy and reduces pollution and greenhouse gas emissions from resource extraction, manufacturing, and disposal.” But the agency’s [own data](#) indicates that the overall recovery rate (from recycling, composting and other processes) has nearly plateaued, following strong growth in the 1980s and 1990s and slower but steady growth through the 2000s. In 2012, about 34.5% of all municipal solid waste generated was recycled, composted or otherwise recovered.

U.S. Recycling Rates Vary Widely by Waste Stream

Percentage recycled, composted or otherwise recovered



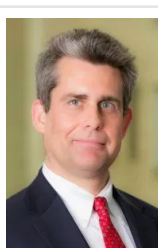
Note: These are the five biggest components of municipal solid waste, together making up 77% of the total waste stream.
Source: Environmental Protection Agency, “Municipal Solid Waste Generation, Recycling, and Disposal in the United States,” February 2014 (and prior dates);
Pew Research Center analysis

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To be fair, Americans are generating less waste than they did just a few years ago, and less of it is ending up in landfills or elsewhere. In 2012, the average American generated 4.38 pounds of waste per day, 2.36 pounds of which was ultimately disposed of, according to our analysis of EPA data. Those figures were down from 4.69 pounds and 2.63 pounds, respectively, in 2005.

Topics: [Energy and Environment](#), [Lifestyle](#)

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