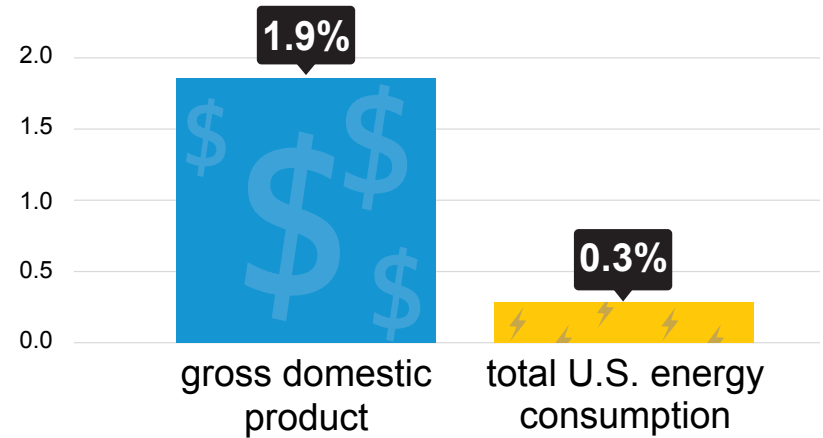


U.S. energy consumption grows at a slower rate than gross domestic product through 2050 as U.S. energy efficiency continues to increase.

Average annual growth rate (2019-2050)

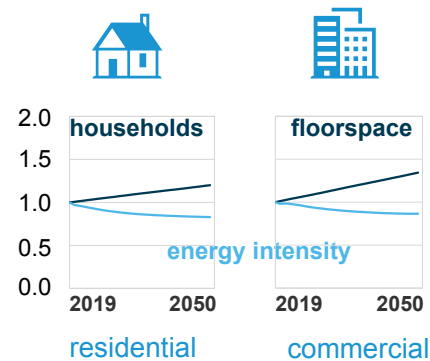
percent growth



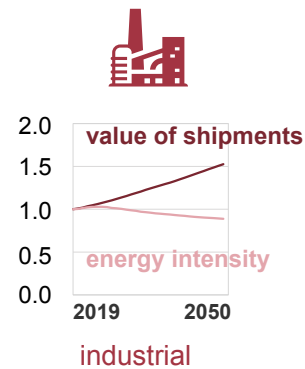
U.S. energy intensity continues its long-term decline through 2050.

Indexed end-use demand drivers and energy intensities by sector (2019–2050)

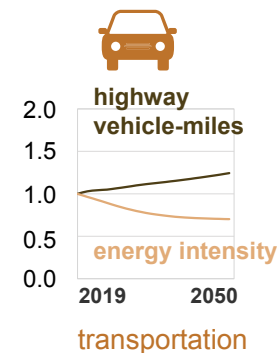
index (2019=1.0)



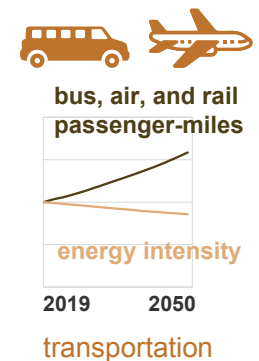
Residential and commercial sector energy efficiency improvements, increases in distributed generation, and regional population shifts partially offset the effects of higher growth rates in population, number of households, and commercial floorspace.



Energy intensity declines in the **industrial** sector as a result of increased energy efficiency of new capital equipment and the higher growth rate in non-energy-intensive manufacturing industries relative to energy-intensive manufacturing industries.



Energy use in the **transportation** sector per passenger-mile of travel in vehicles declines as newer, more fuel-efficient vehicles enter the market.



In the **transportation** sector, adoption of energy-efficient technology and practices results in decreasing energy use per passenger-mile for rail, bus, and air travel.

Note: Energy intensities are a lighter shade of the same color as the respective driver, and they are calculated as energy used per unit of respective demand driver.

Source: U.S. Energy Information Administration, *Annual Energy Outlook 2020* (AEO2020) Reference case