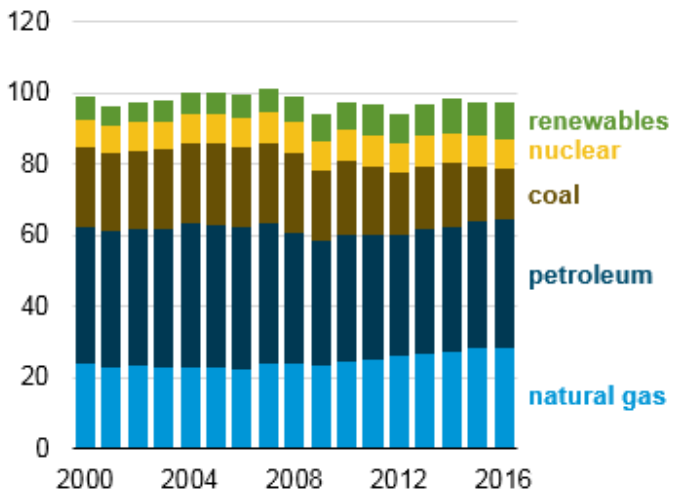


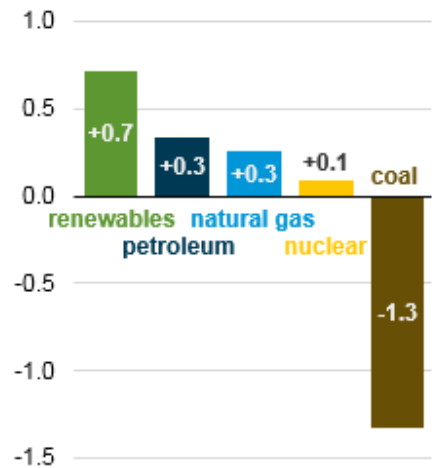
U.S. Energy Use Rose a Bit in 2016; Rise in Renewables Offsets Coal Drop

Big increases in renewable energy consumption more than offset a deep drop in the use of coal, pushing U.S. energy consumption up slightly in 2016, says the latest data from DOE's Energy Information Administration (EIA).

United States total energy consumption (2000-2016)
quadrillion British thermal units



Change from 2015
quadrillion British thermal units



Energy consumption in the United States in 2016 totaled 97.4 quadrillion British thermal units (Btu), a slight increase from the 2015 level. Consumption of coal decreased by 9 percent, but that drop was exceeded by increases in the consumption of renewables, petroleum, natural gas, and nuclear fuel.

Renewable energy production increased from 10.9 percent (2015) to 12.06 percent (2016) of total energy production in the United States. Renewable energy consumption increased from 9.91 percent to 10.43 percent.

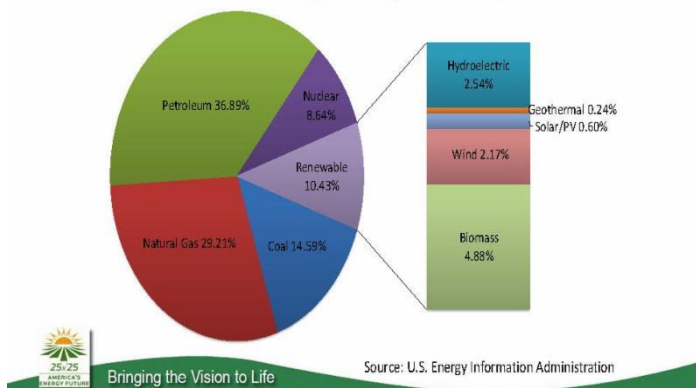
Every renewable energy resource saw increases in production and consumption from 2015 to 2016. Renewable energy production grew incrementally.

The EIA says renewables had the largest increase in energy consumption in 2016. Wind generation increased by nearly 20 percent, making up almost half of all renewable consumption increases. Solar consumption also significantly increased, as [considerable electric generating capacity was added for both wind and solar resources in 2016](#). Hydroelectric consumption increased by 7 percent as the West Coast recovered from severe drought conditions.

U.S. Primary Energy Consumption by source, 2016

2016 Total Energy Consumption: 97.421 Quad BTU

2016 Renewable Energy Consumption: 10.160 Quad BTU



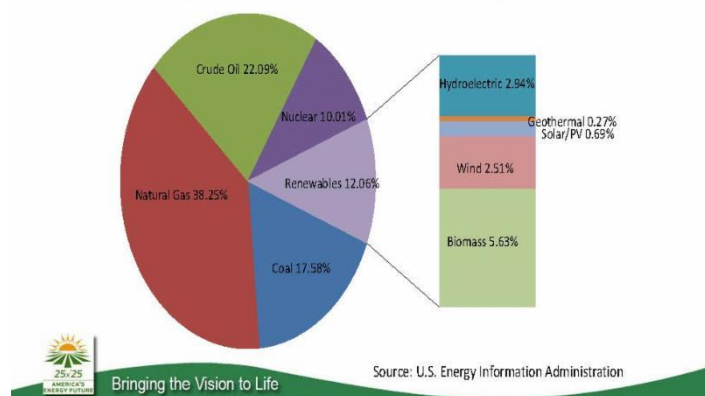
Together, wind, hydro, and solar made up 91 percent of renewable consumption increases. Biomass consumption, which accounted for 47 percent of all renewable consumption in 2016, remained close to its 2015 level.

Fossil fuels continue to account for the bulk of U.S. energy consumption, and the consumption of petroleum and natural gas both increased in 2016. However, those increases were more than offset by lower coal consumption. Overall, fossil fuels made up 81 percent of the United States' total energy consumption in 2016, slightly lower than 2015 levels, but down from 86 percent in 2005.

U.S. Primary Energy Production by source, 2016

2016 Total Energy Production: 84.127 Quad BTU

2016 Renewable Energy Production: 10.146 Quad BTU



Petroleum consumption increased to 19.6 million barrels per day in 2016, led by increases in the transportation sector. Natural gas consumption increased to 27.5 billion cubic feet, led by higher demand in the electric power and industrial sectors. Natural gas consumption in the residential and commercial buildings sectors fell slightly, reflecting lower heating demand.

Coal consumption fell to 730 million short tons in 2016, the third consecutive year of declining coal consumption. Coal consumption decreased in the electric power sector by 61 million short tons (8 percent), while industrial sector coal consumption fell by 6 million short tons (11 percent).

Nuclear fuel consumption in the United States increased 1 percent in 2016. The [number of total operable nuclear generating units](#) briefly increased from 99 to 100 when [Watts](#)

[Bar Unit 2 in Tennessee came online](#). Later in the year, the retirement of [Nebraska's Fort Calhoun nuclear facility](#) brought the number of nuclear units in the United States back to 99. Year-end 2016 nuclear capacity was slightly higher than in 2015 (99.3 gigawatts versus 98.7 gigawatts), and annual average nuclear capacity factors, which reflect the use of power plants, were also slightly higher, at 92.5 percent versus 92.3 percent in 2015.

More information about total energy consumption, production, and trade is available in EIA's [Monthly Energy Review](#).