BY THE NUMBERS:

ROUNDING THE PEAK

Annual U.S. carbon emissions are down by more than a gigaton since 2007. The next gigaton of cuts may be the hardest.

BY JEFFREY WINTERS

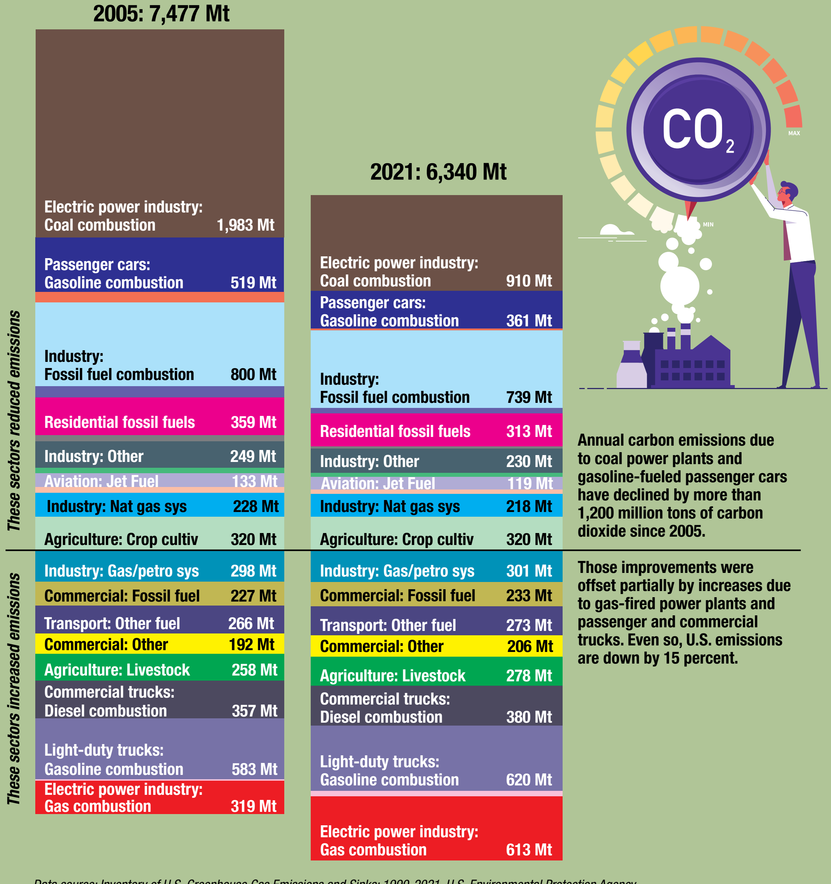
For generations, every sector of the economy continued to emit greater amounts of carbon dioxide and other heat-trapping gases. Then from 2004 to 2007, the relentless climb stopped. In the years since 2007, the U.S. has cut its emissions by more than 15 percent. According to the U.S. Environmental Protection Agency, which produces an annual greenhouse gas emissions inventory, in 2021, greenhouse gas emissions were below 1990 levels, which is the first year the EPA collected the data.

Nearly 78 percent of the decrease in emissions is accounted for by the electric power sector, as the industry began switching from coal-fired plants to gas turbines and renewables. Fuel economy standards for new automobiles have increased substantially over the past 15 years, and that accounts for some of the 30 percent drop in emissions due to gasoline-powered cars.

The chart shows major emissions categories, sorted by whether they have decreased or increased since 2005.

GREENHOUSE GAS EMISSIONS BY ECONOMIC SECTOR

(MILLION TONS CO_2 EQUIVALENT)



Annual carbon emissions due to coal power plants and gasoline-fueled passenger cars have declined by more than 1,200 million tons of carbon dioxide since 2005.

Those improvements were offset partially by increases due to gas-fired power plants and passenger and commercial trucks. Even so, U.S. emissions are down by 15 percent.

Data source: Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021. U.S. Environmental Protection Agency