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U.S. energy-related carbon dioxide emissions to decrease by 7.5% in 2020

The U.S. Energy Information Administration is forecasting that U.S. energy-related carbon dioxide emissions (CO2) will decrease by 7.5% in 2020, driven by the economic slowdown and restrictions on business and travel activity related to COVID-19. This follows a 2.7% decrease in emissions in 2019. EIA forecasts that energy-related CO2 emissions will then increase by 3.6% in 2021.

In its April *Short-Term Energy Outlook*, EIA estimates that in 2020, CO2 emissions from petroleum will decrease 7% and from coal will decrease 18.4%. EIA creates estimates of energy-related CO2 emissions based on energy consumption and on the amounts of CO2 that are released when different fuels are burned. Total CO2 emissions depend on total energy consumption and the fuel mix of the energy consumed. When it is burned, coal creates the most CO2 of the major fossil fuels. However, because more petroleum products (such as motor gasoline) are consumed than coal, petroleum is the largest source of CO2 emissions in the United States. Natural gas is the least carbon-intensive fossil fuel, but in recent years, because of its increasing consumption, it generates more U.S. CO2 emissions than coal. Non-fossil fuels such as nuclear power and renewable generation emit no direct CO2 at the end use. As these noncarbon generation sources increasingly enter the fuel mix, energy demand can be met without a proportional increase in energy-related CO2.

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