TARGETING CLIMATE CHANGE EFFORTS

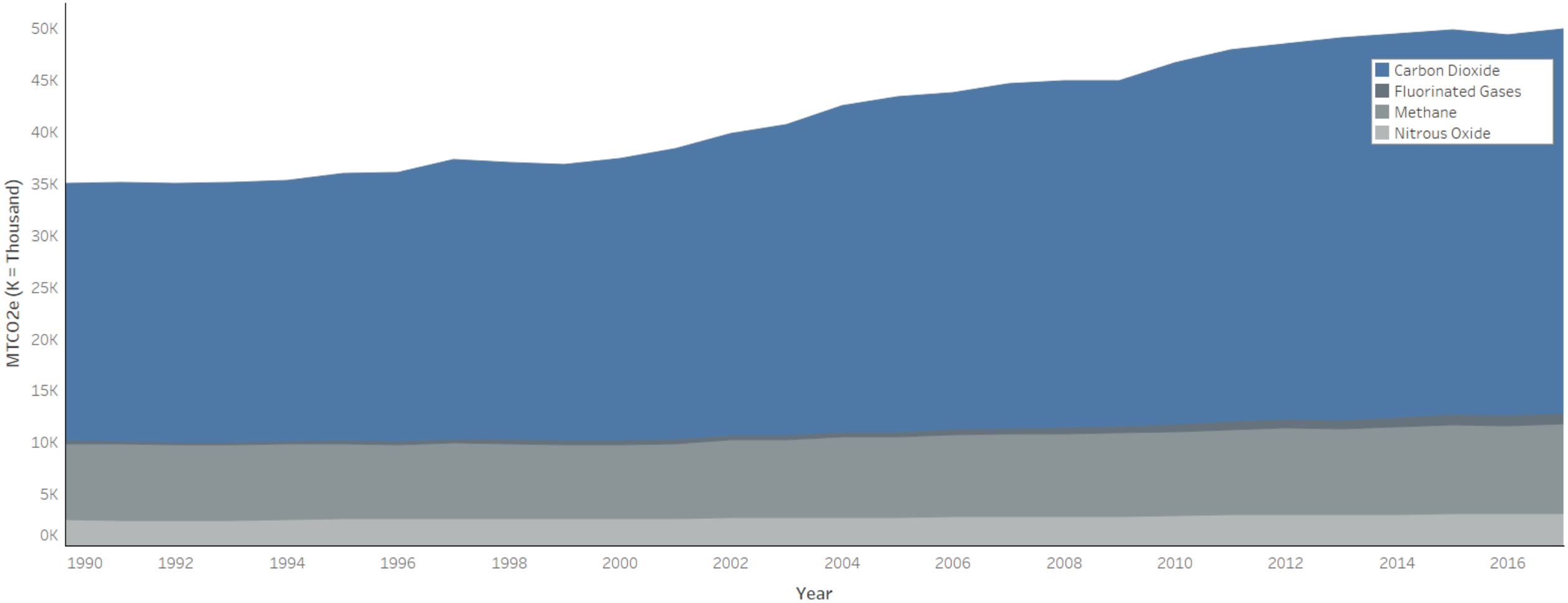
Sam Loyd | January 2021

A LOOK AT GASES

Focus on Carbon Dioxide (CO2) Emissions Continuing to Climb:

Annual Greenhouse Gas (GHG) Emissions (1990-2017)

MTCO2e is a million metric tons of CO2 equivalent gas.
Global CO2 emissions are growing despite warnings, and CO2 is the primary GHG being emitted.

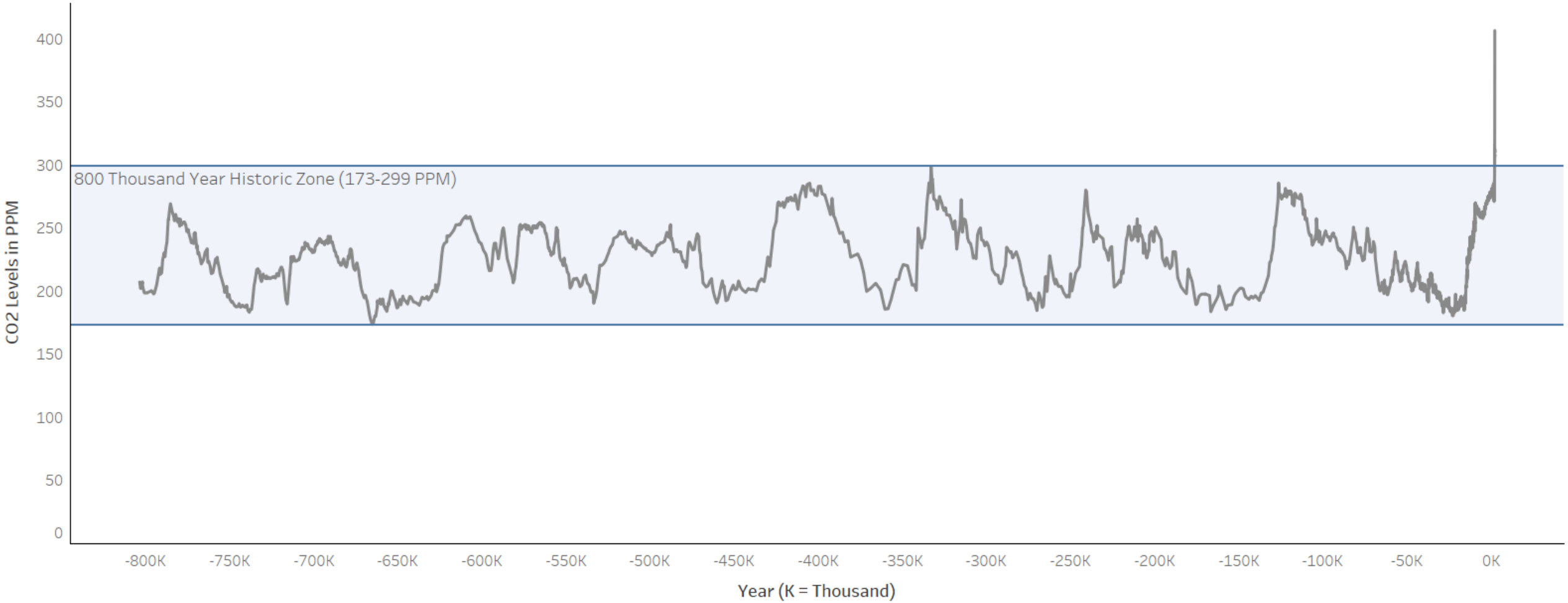


Data Source: Climate Watch (2018)

Climbing Well Beyond an 800 Thousand Year Historic Zone:

Annual Average of Atmospheric Carbon Dioxide (CO2) Levels in Parts Per Million (PPM)

Until 1905, atmospheric CO2 levels had not exceeded 299 PPM going back over 800,000 years.
By 2017, the trend had continued to climb and exceeded that mark by over 107 PPM.



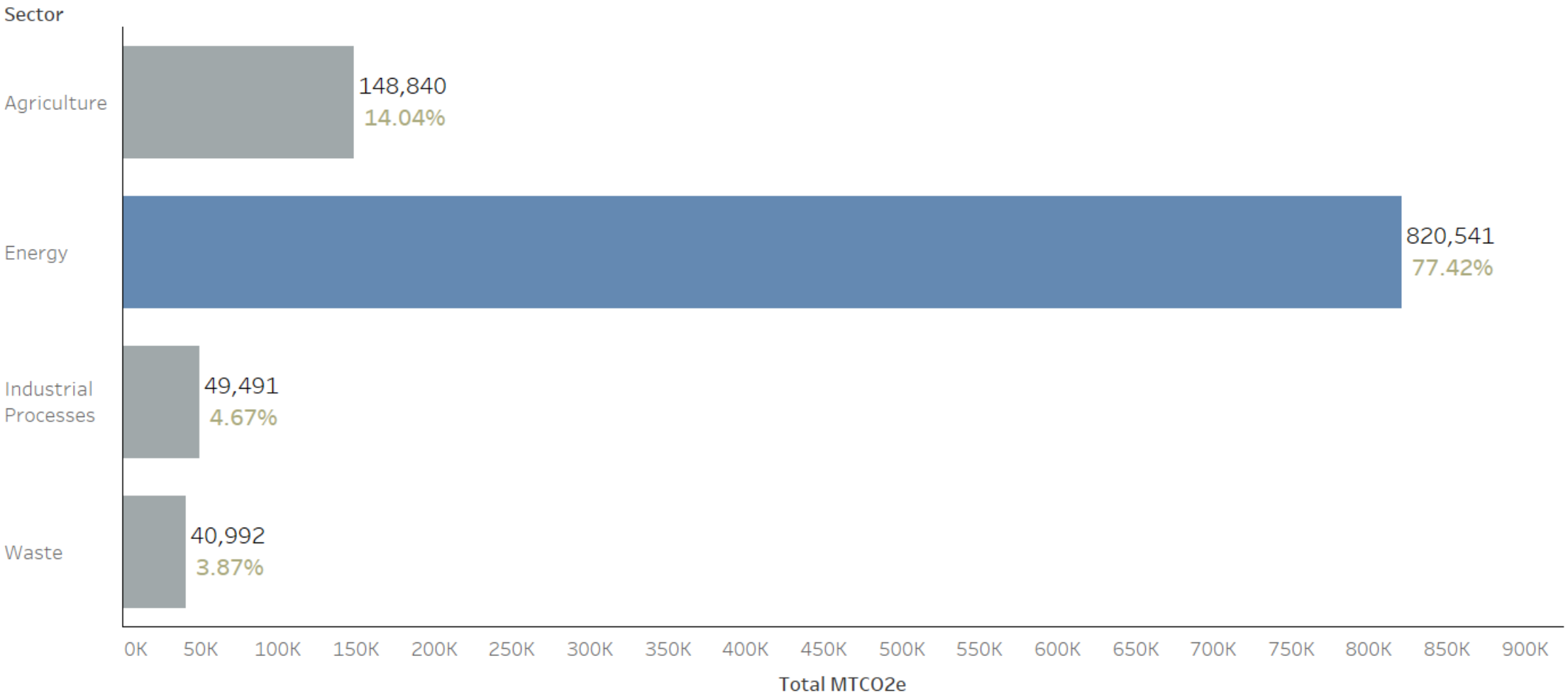
Data Source: Our World in Data using data from NOA/ESRL (2018)

IMPACT FROM ECONOMIC SECTORS

Target Efforts on the Energy Sector:

Total CO2 Levels Emitted by Sector Including Percent of Total (1990-2017)

The energy sector accounts for over 77% of all CO2 emitted.
It deserves a similar level of attention.



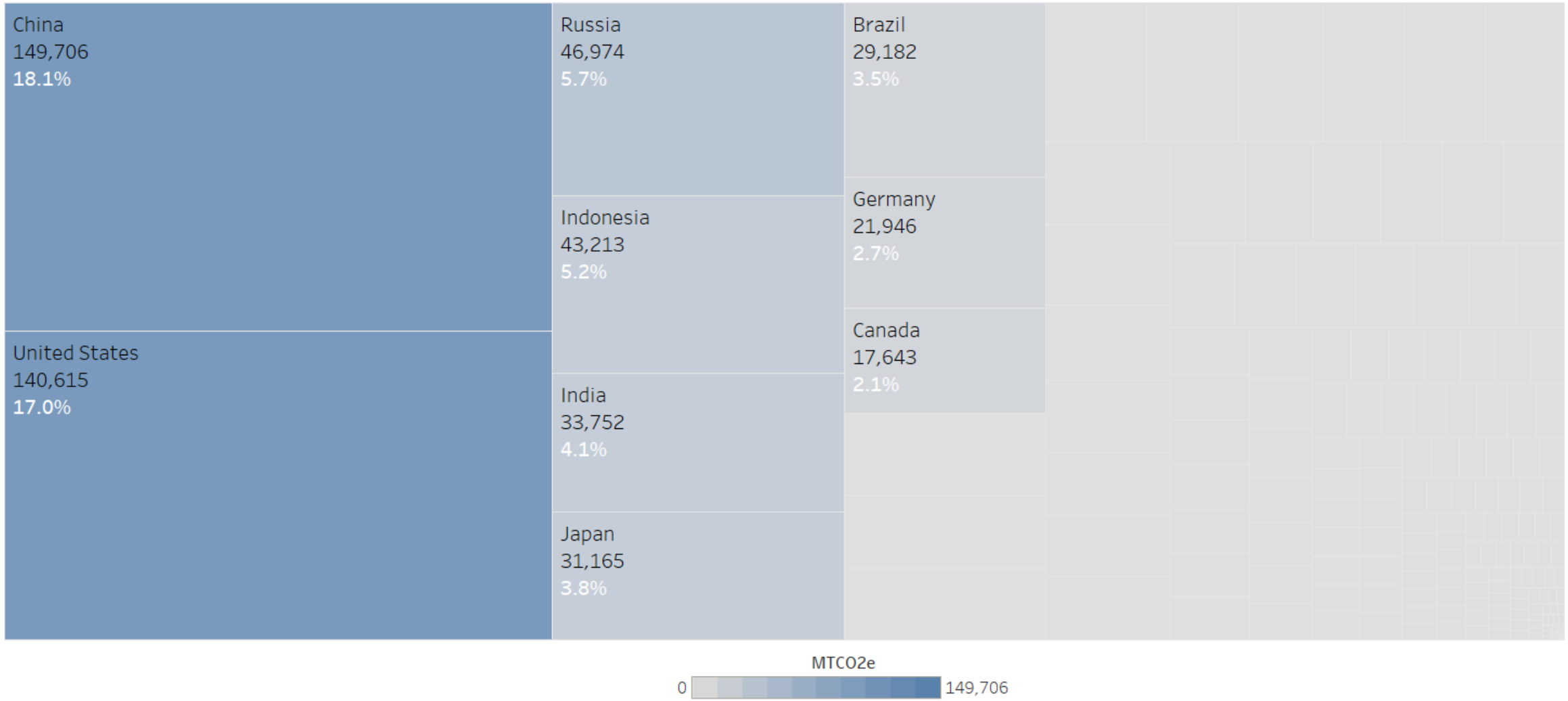
Data Source: Climate Watch (2018)

COMPARING NATIONS

Two Nations Stand Out for Targeting Climate Efforts:

C02 Emission Totals Indicated by Size and Color for Each Nation in MTCO2e (1990-2017)

China and the United States are the two largest CO2 emitting nations jointly accounting for over 35%.

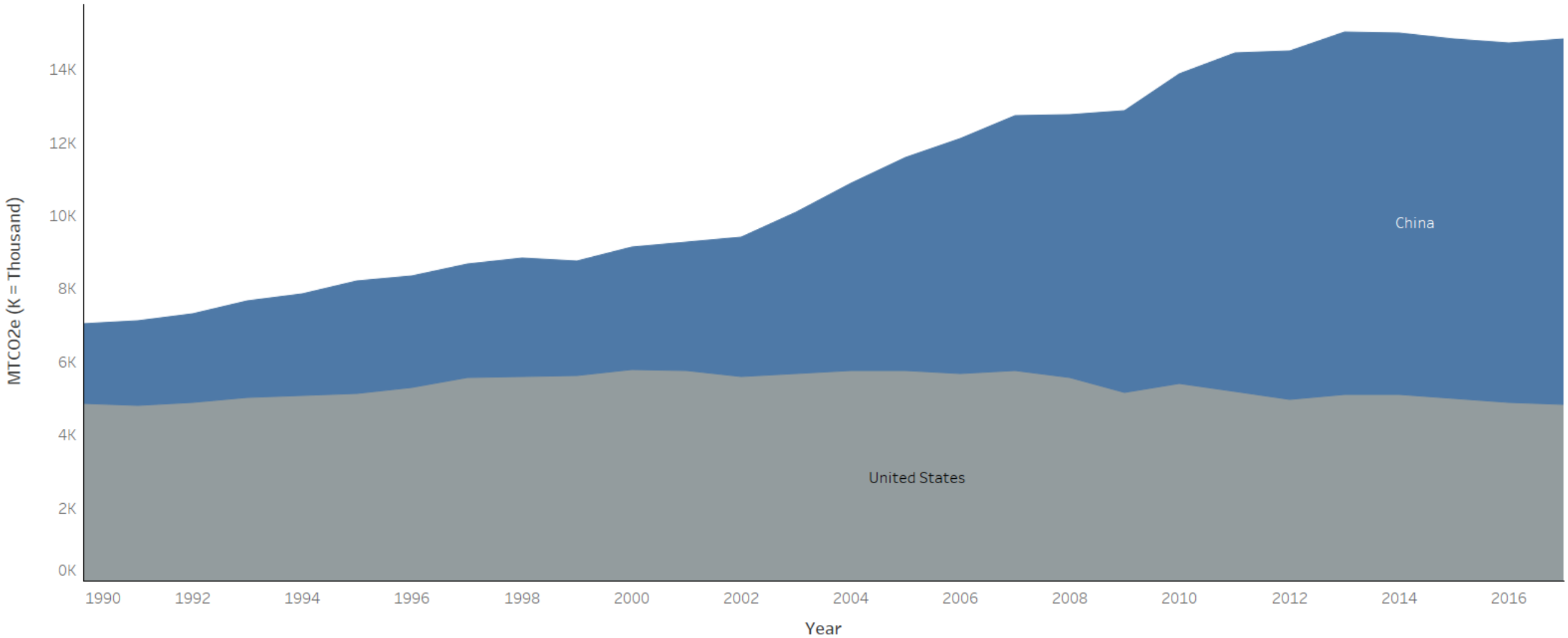


Data Source:Climate Watch (2018)

Trending Indicates That China Is a Huge Problem Going Forward:

Total Annual CO2 Emissions in MTCO2e (1990-2017)

China's total CO2 emissios are increasing at an alarming rate!

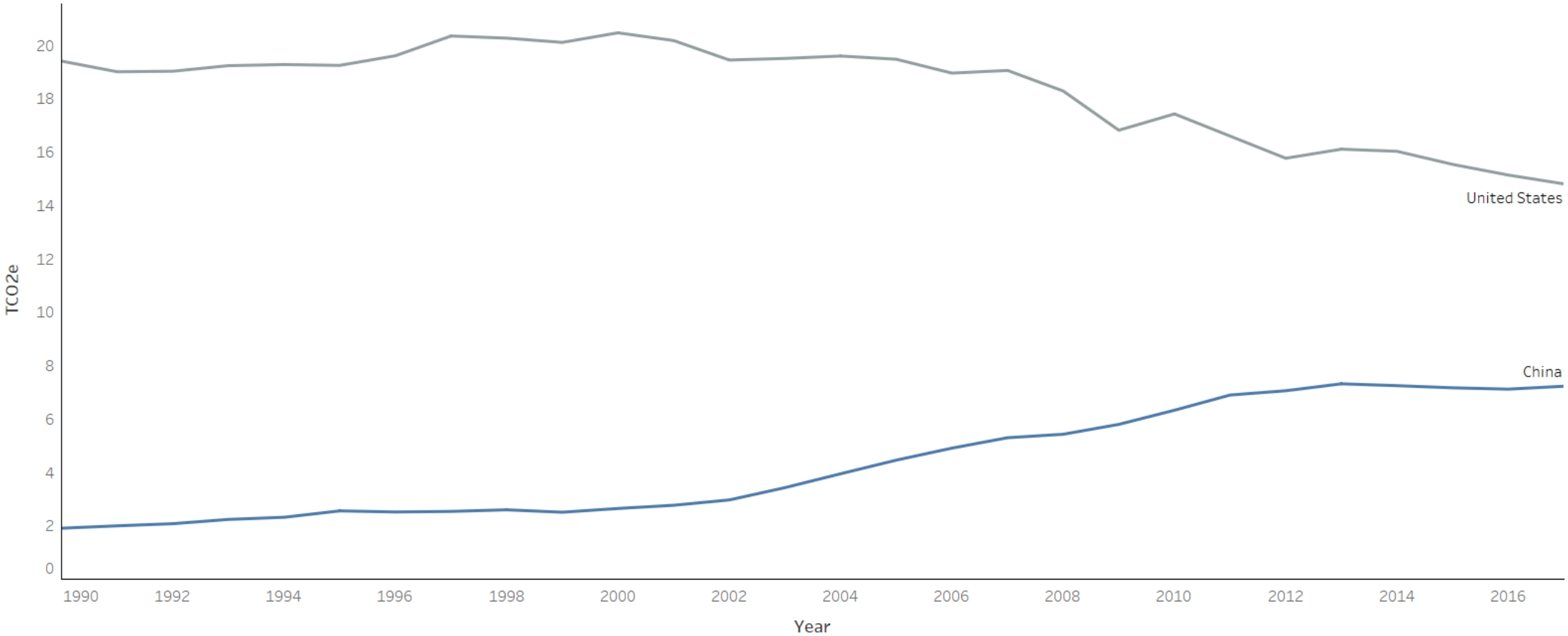


Data Source:Climate Watch (2018)

Evaluating Two Different Problems That These Nations Pose:

Comparing China and the United States Annual Per Capita CO2 Emissions (1990-2017)

TCO2e is a metric ton of CO2 equivalent gas. The much larger population of China sets up a growing concern.
China's CO2 emissions per person almost quadruple while the United Sates slowly improves from a much worse start.



Data Source:Climate Watch (2018)

FOCUS

Reducing unprecedented CO2 levels

PRIMARY TARGETS

Cleaning up CO2 emissions from the energy sector

Reversing the increasing trajectory of CO2 emissions in China

Increasing the pace of CO2 reduction in the United States