



# TARGETING CLIMATE CHANGE EFFORTS

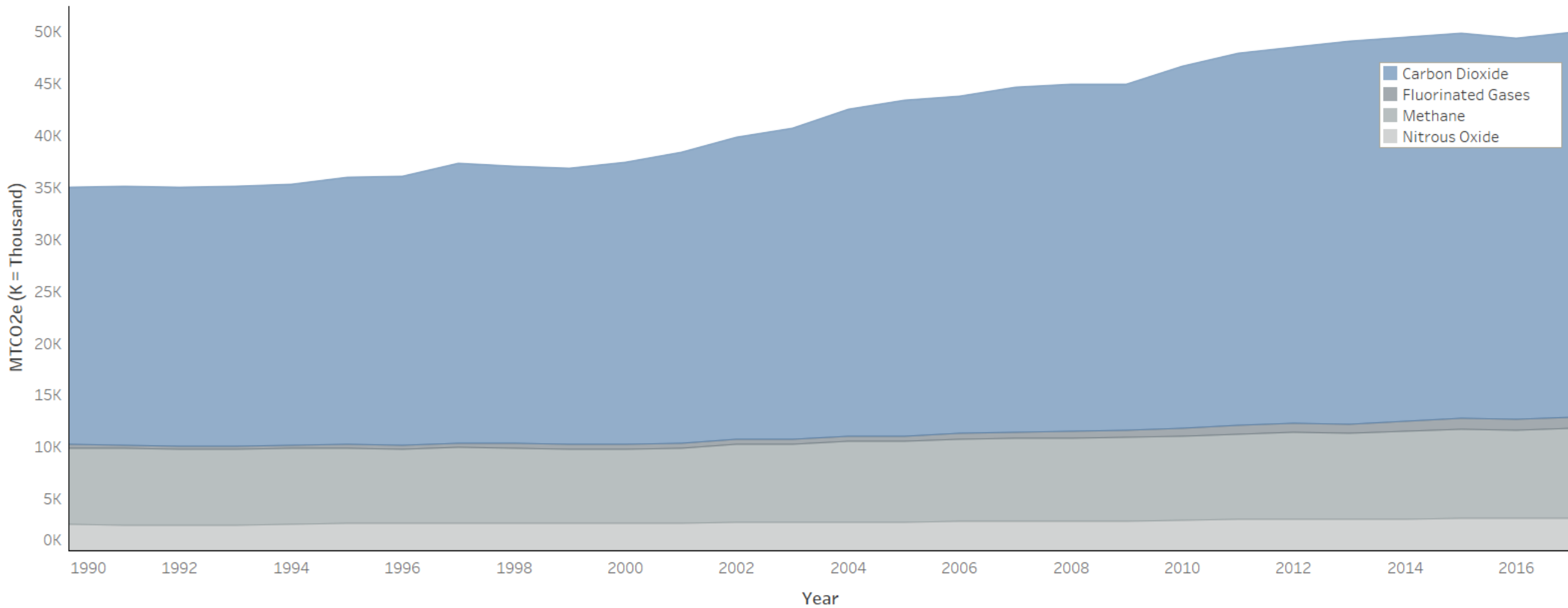
Sam Loyd | January 2021

# We Must 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.

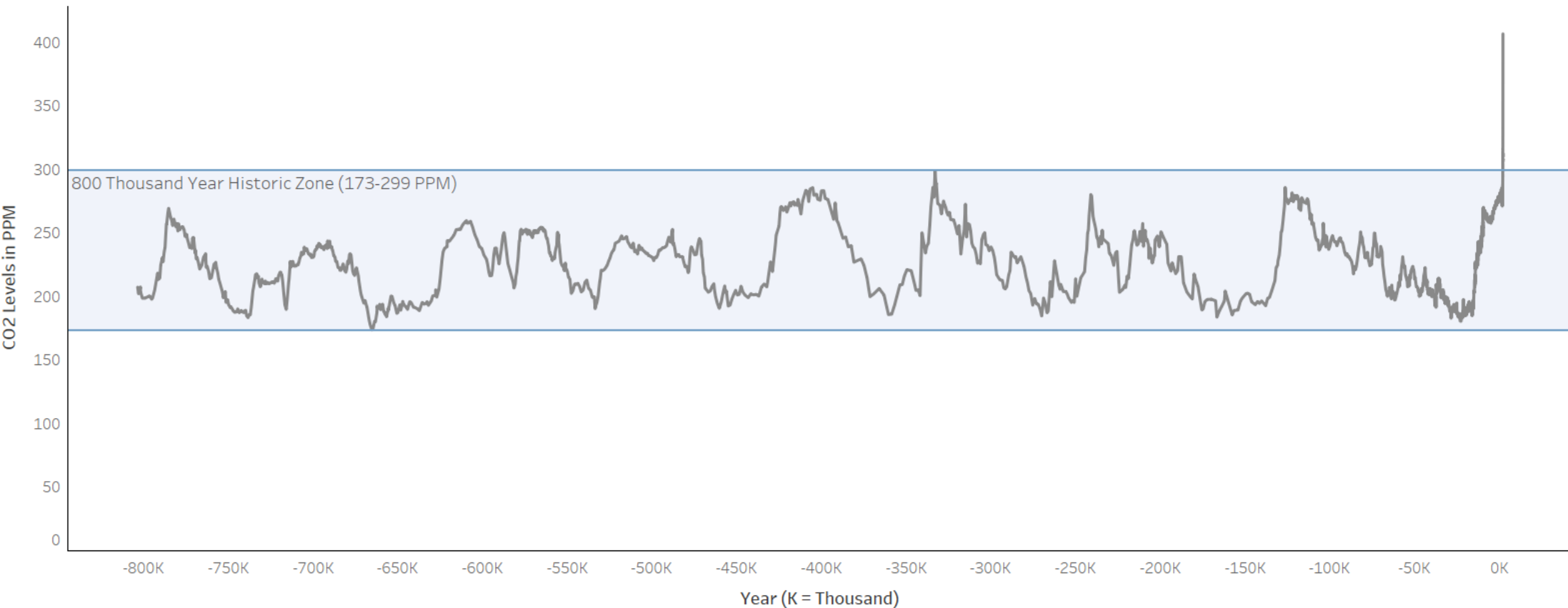


Data Source: Climate Watch (2018)

# Climbing Well Beyond an 800 Thousand Year Historic Zone:

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

Until 1905, Earth's 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**.

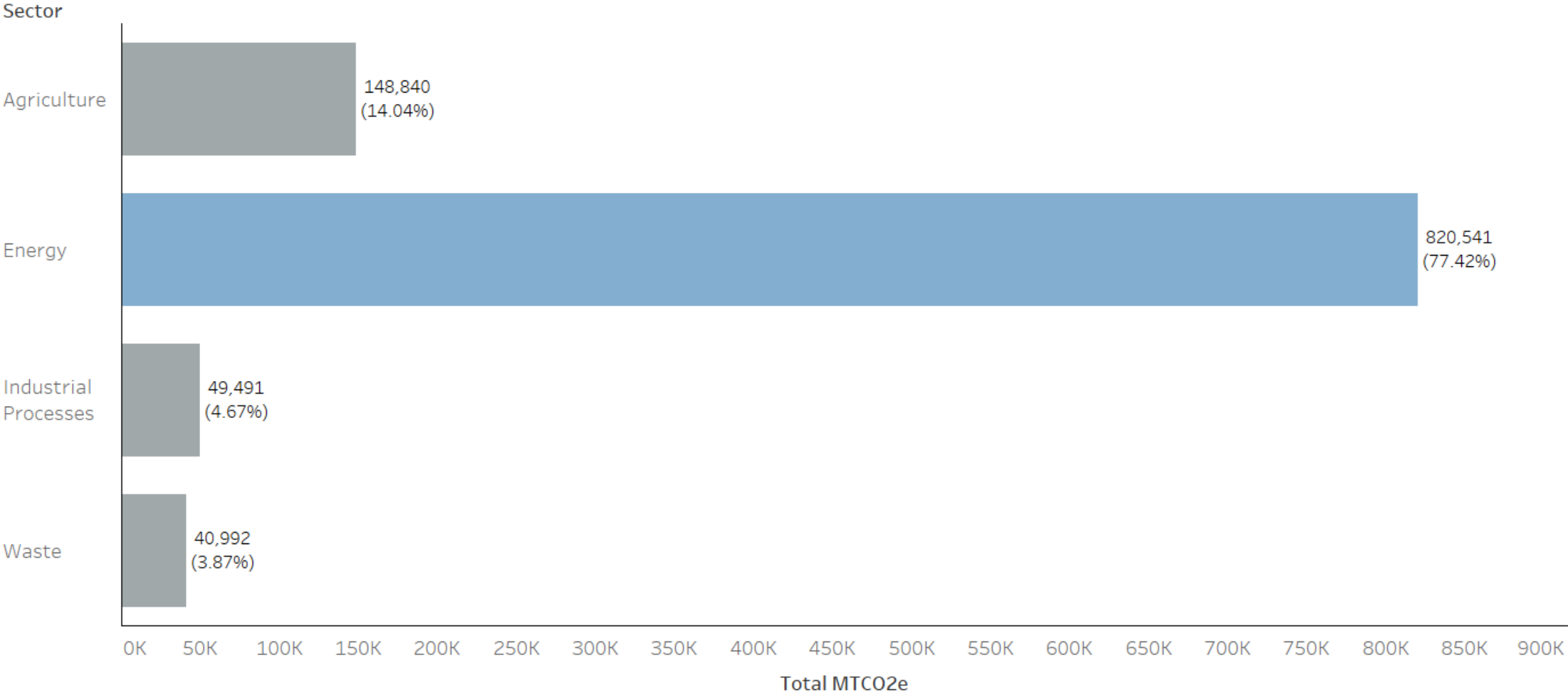


Data Source: Our World in Data using data from NOAA/ESRL (2018)

# We Also Need to Focus on the Energy Sector:

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

The **energy sector releases far more CO2** than any other sector.  
It accounts for over **77% of all CO2 emitted**. It deserves a similar level of attention.

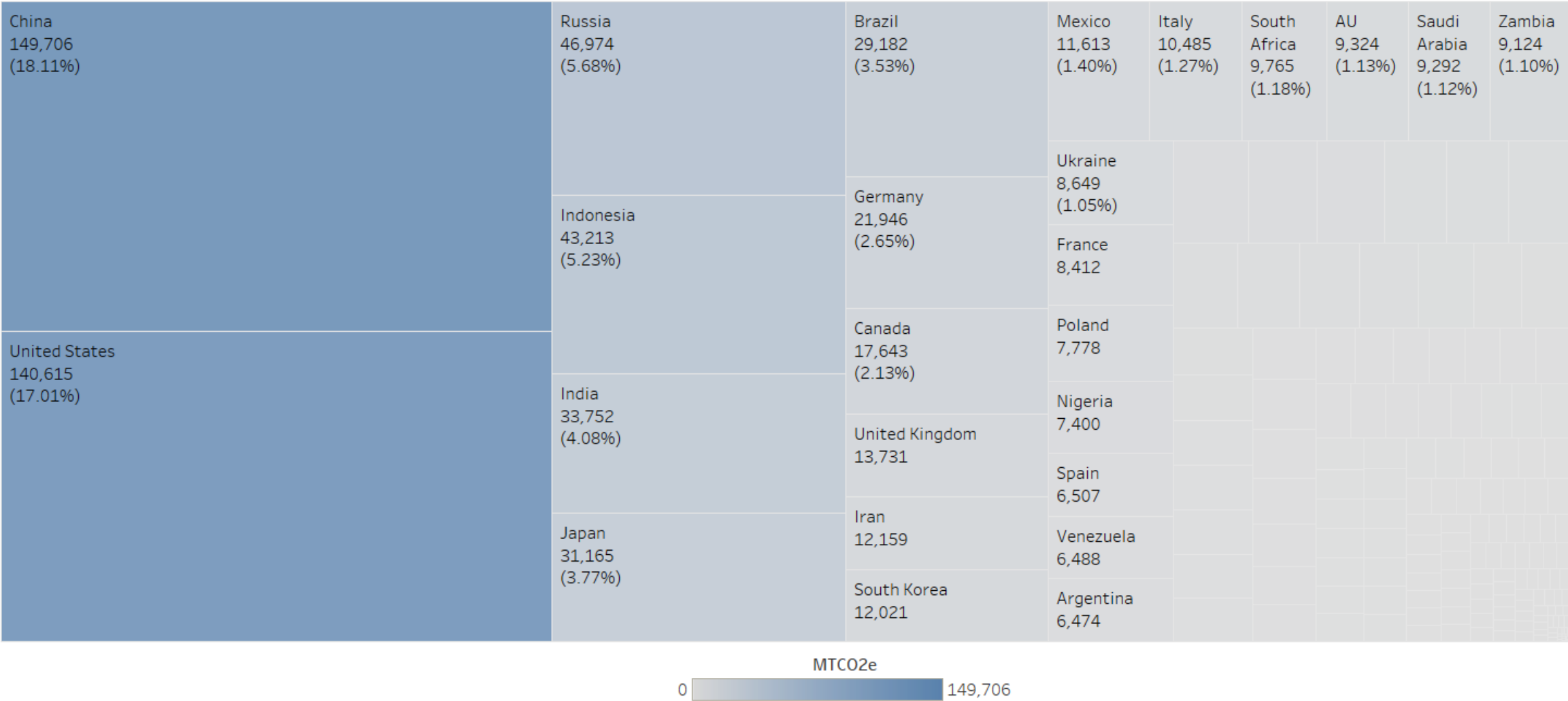


Data Source: Climate Watch (2018)

# Two Nations Stand Out for Targeting Climate Efforts:

## CO2 Emission Totals Indicated by Size and Color for Each Nation in MTCO2e (1990-2017)

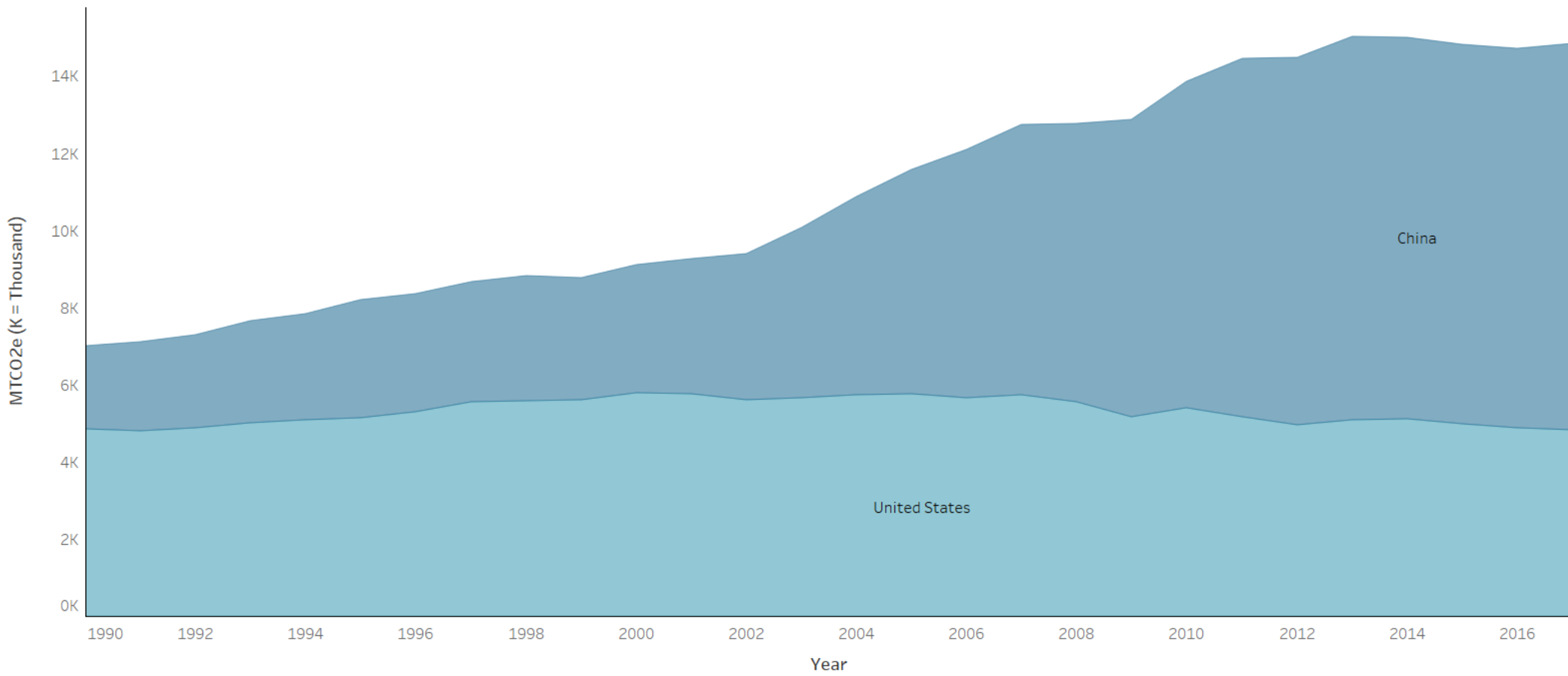
China and the United States are the **two largest** CO2 emitting nations jointly accounting for **over 35%**.



# 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!



# Evaluating Two Different Problems That These Nations Pose:

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

TCO2e are metric tons of CO2 equivalent gas. Total emission measures ignore the population differences.

China's CO2 emissions per capita grow while the United States slowly improves from a much worse start.

