Green House Gases (GHG) are gases such as CO2, methane, nitrous oxide, and fluorinated gases that trap heat in the atmosphere.

Over time, this causes the earth to get warmer and leads to climate change.

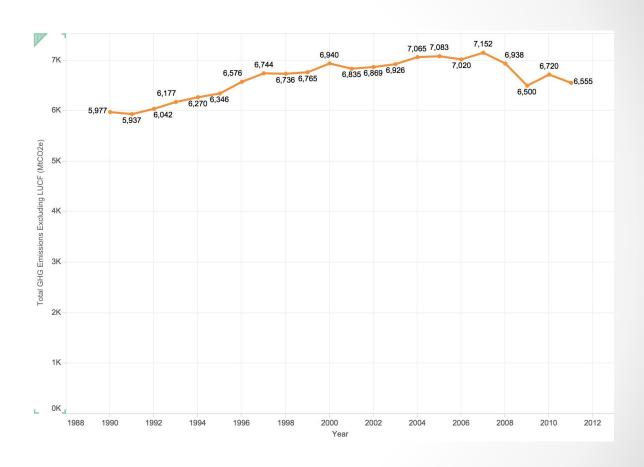
Green House Gas Emissions in the United States

This story revolves around the unit MtCO2e, or "million metric tons to CO2 equivalents."

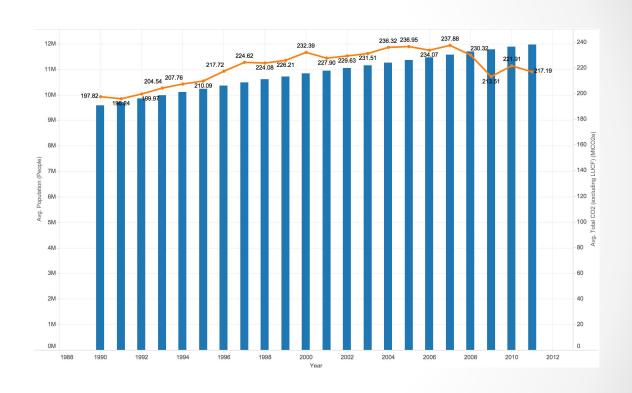
1 MtCO2e could fill up a balloon the size of a football field.

Total US GHG emissions in the US steadily increased from 1990 - 2007.

During the recession, GHG emissions fell. Since then, emissions have leveled off at about 9.8% above the 1990's level.

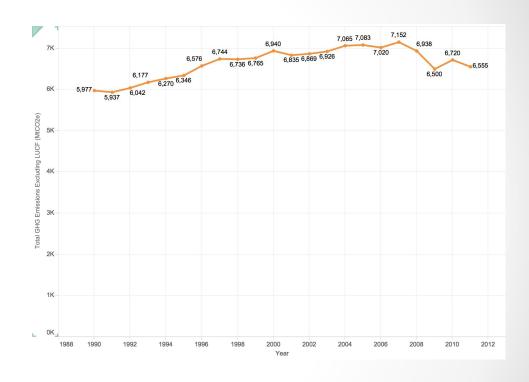


During the same period, the US population has steadily increased. In 2011, the US population was 25% higher than it was in 1990.



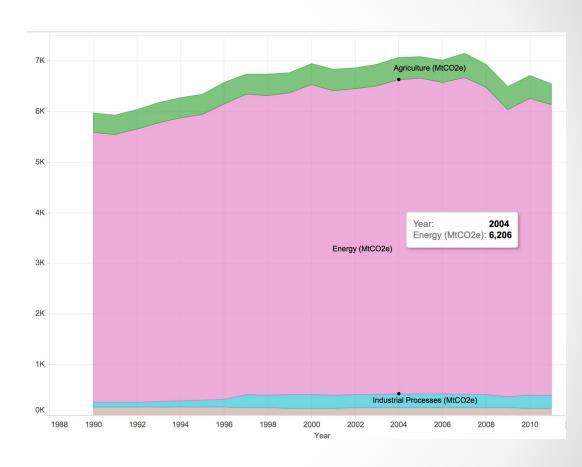
GHG Emissions by Sector

Waste, industrial process and agriculture are three major sectors of emissions. Emissions in these sectors have held relatively steady throughout the past decades. (have sectors appear on chart)

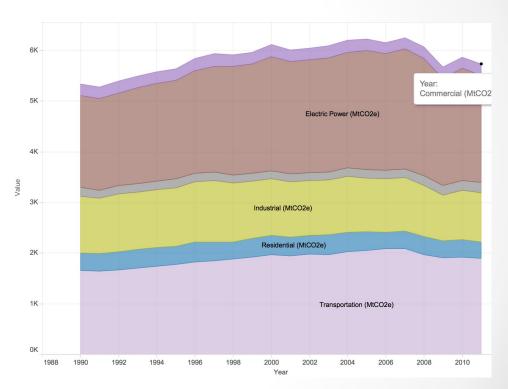


But energy contributes the most overall to emissions in the US.

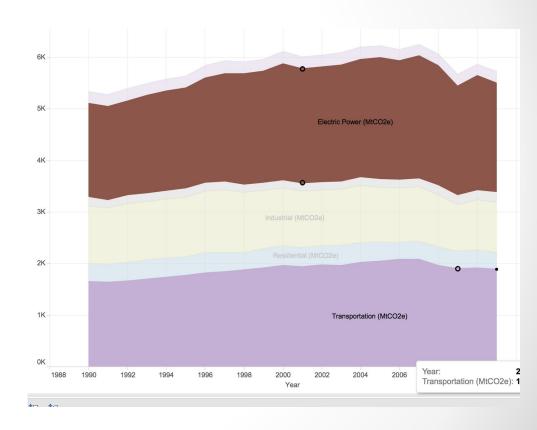
The energy sector has also accounted for the major fluctuations in GHG emissions since 1990.



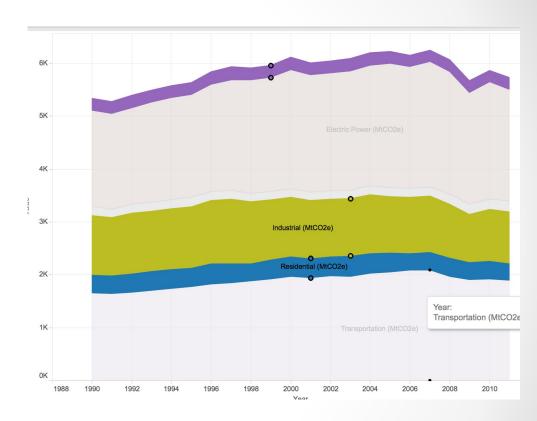
Most of the emissions in the energy sector come from burning fossil fuels: 91% of emissions came from fossil fuel combustion in 2011 (up from 89% in 1990).



Transportation and electric power generation make up the largest portion of emissions in the energy sector.

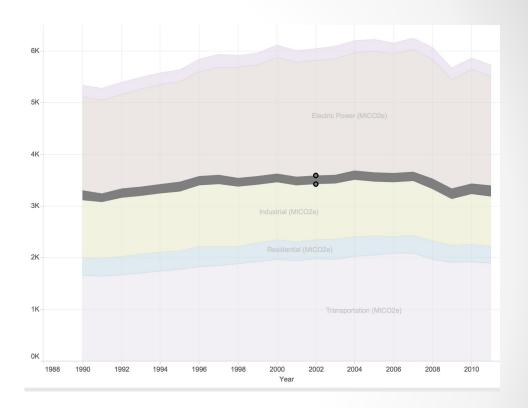


Industrial, residential, and commercial emissions combined account for a third of all emissions in the energy sector.

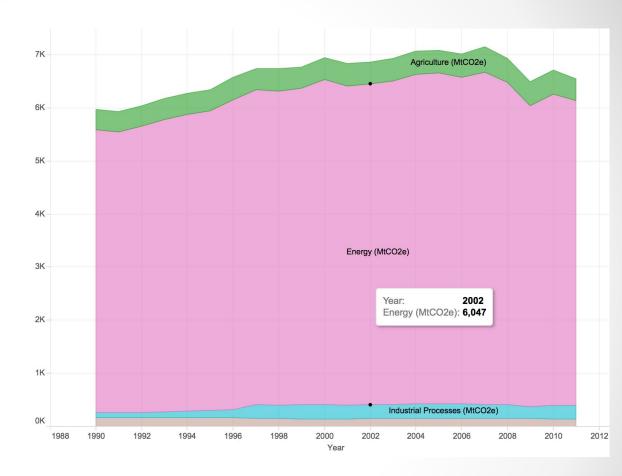


Fugitive emissions contribute the least to overall emissions. They are the result of unintended gas leaks from pressurized equipment.

Although fugitive emissions contribute the smallest amount, they annually contribute an average of 170 million metric tons of CO2 equivalents in emissions.

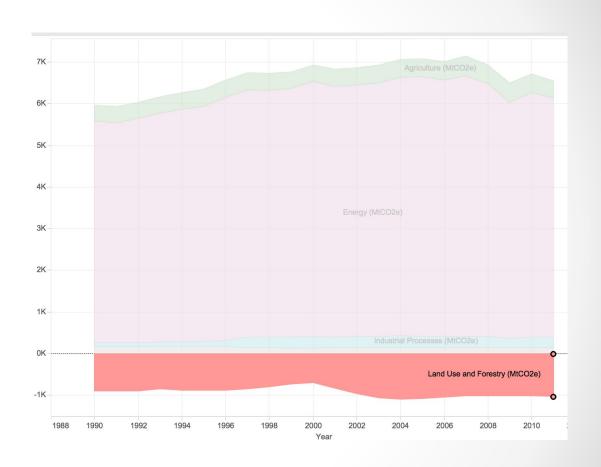


So: total emissions are made up mostly by fossil fuel combustion in the energy sector.

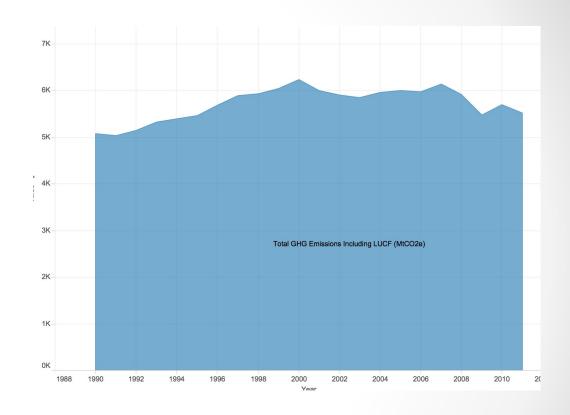


...but, the good news is: there is one sector that actually removes carbon from the atmosphere.

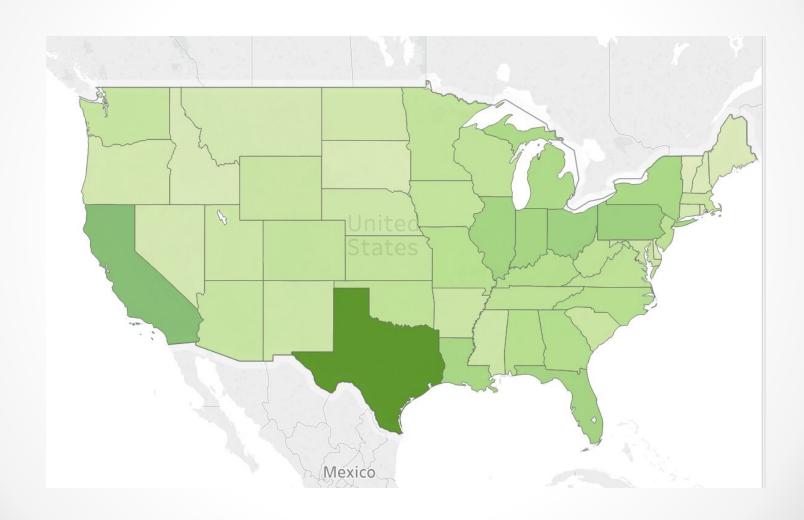
The land use change and forestry (LUCF) sector removes an average of 14% of total emissions each year.



This results in net emissions that are on average 86% of what they would be without LUCF carbon sequestration.



How does your state stack up?



Inspired to do more?

Here are some suggestions for how to decrease your carbon footprint as an individual.

