

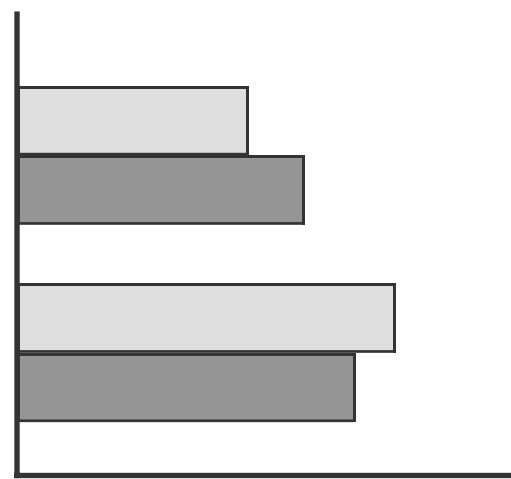
How Increased Carbon Dioxide Emissions From Energy Consumption Has Led to Climate Change

Since the Industrial Revolution, humans have increased atmospheric carbon dioxide (CO₂) concentration more than one third. According to NASA, this long-lived forcing of climate change was caused by the greenhouse effect – "warming that results when the atmosphere traps heat radiating from Earth toward space."

Over the last century, the burning of fossil fuels like coal and oil has increased the concentration of atmospheric CO₂. This happens because the coal or oil burning process combines carbon with oxygen in the air to make CO₂.



U.S. Energy-Related Carbon Dioxide Emissions From 1990-2017



The bar chart to the left shows us that U.S. energy-related carbon dioxide emissions decreased 0.9% in 2017. Yet, even though energy-related CO₂ emissions decreased in 2017, emissions growth was 20 million metric tons above trend.

Source: U.S. Energy Information Administration

The Effects of Climate Change are Already Evident



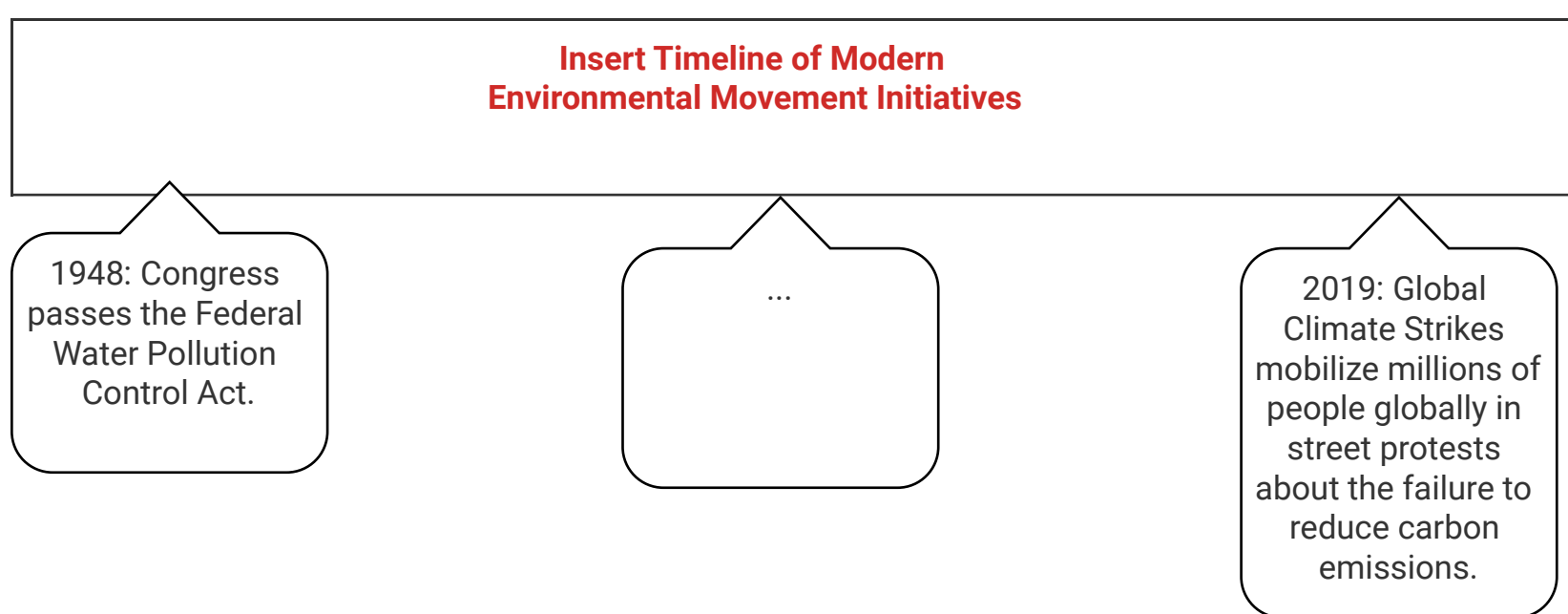
According to NASA, "A stronger greenhouse effect will warm the oceans and partially melt glaciers and other ice, increasing sea level. Ocean water also will expand if it warms, contributing further to sea level rise."



Most recently, we saw the Amazon rainforest on fire.

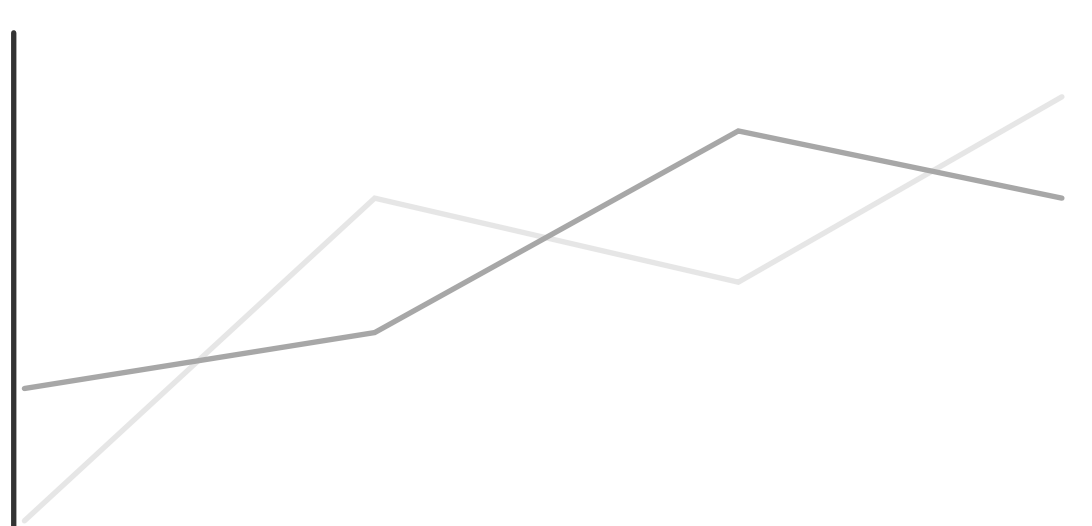
While there may be multiple causes of the fire, climate change could be one of them. Carbon Brief states that climate change can worsen wildfires by increase temperatures and raising the chances of drought. Their websites states, "Both of these factors can create 'tinderbox' conditions, meaning that – once ignited – a fire can spread very quickly over large areas of land."

How People Have and Are Responding to Climate Change Impacts



California Plans to Decrease Greenhouse Gas Emissions 40% by 2030

CA greenhouse gas emissions by sector (1990-2015) and targets through 2050



Source: U.S. Energy Information Administration

10 Steps YOU Can Take To Help Fight Climate Change NOW

1. Use Energy Wisely (and save money, too)!

Consider making some or all of these small changes. Together, they can really add up.

- Change to energy-efficient light bulbs
- Install a heat pump in your home. Heat pumps work by extracting heat from one location and transferring it to another.
- Unplug computers, TVs and other electronics when you're not using them

2. Support Renewable Energy

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3. Green Your Commute

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