

The article I found was from oilprice.com (<https://oilprice.com/Energy/Crude-Oil/Does-The-US-Lead-The-World-In-Carbon-Emissions-Reduction.html>), and was disputing a Washington Post article's (https://www.washingtonpost.com/news/fact-checker/wp/2017/10/23/epa-administrator-scott-pruitts-claim-the-u-s-is-leading-the-world-in-co2-footprint-reductions/?utm_term=.78ccc0dfa6f6) claims on the United States' CO2 emissions relative to other countries, which in turn was disputing a statement that EPA director Scott Pruitt made on the issue. I felt that since there was this controversy over the emission rates of different countries, I should make a visualization that clears it up.

Since the article discussed per capita emissions and how much they've changed over the years, compared the US rates to China's rates and the rest of the world's, and also gave some details about emission rates of European countries, I decided I would need to include the whole world in my visualization so that viewers could clearly see which countries have higher emission rates per capita, and how they have changed over the years.

The use of a world map made it as easy as possible to get a quick impression of all this data as quickly as possible. The legend was clear and the countries were shaded appropriately based on how much CO2 emissions per capita they released in that year (darker shade = more emissions). To allow year-by-year references, I included the ability for users to select any year between 1960 and 2014 and instantly see the data, as well as an animated time-lapse that gave a bigger picture impression of how emissions rates were changing year to year around the world.

I placed my data right around where the article was discussing percentage changes in emissions for different countries. I saw that as an appropriate place to put a visualization that showed the changes.

While processing my data, I noticed a few anomalies that I decided were worth exploring more. For example, in 1966, the UAE only emitted 0.16 tonnes of CO2 per capita. In 1967, that value jumped more than 30-fold, to 5.38 tonnes per capita, and in 1969 it made another huge leap to 100.7! I noticed some other major changes for some countries in the 1960s and 1970s, and decided that those changes were worth explaining in the time-lapse. As per this example, the UAE started shipping oil in the late 1960s, and production soared.

Data: I found the country cartogram data from <https://gist.github.com/markmarkoh/2969317> (Note: the country codes were only 2 letters and had to be manually updated one by one to their respective three letter codes from my emissions data)

The emissions data was found at <https://data.worldbank.org/indicator/EN.ATM.CO2E.PC?end=2014&start=1967>