On another front, US carbon emissions were down for the year, due to COVID, although that's expected to be temporary. To the extent that people end up using Zoom to work at home or to substitute for business travel, changes could be longer-lasting. We are also seeing some of the likely fingerprints of climate change in the succession of wildfires, intense hurricanes, and floods of 2020.

On the international front, the big news was China's ambitious new target for controlling emissions. Sadly, Trump's decision to withdraw the U.S. from the Paris Agreement became final this year. Happily, thought, the withdrawal will only last until Inauguration Day, January 20, 2021.

Here's a survey of other developments.

The federal government. Trump has continued his campaign of destruction against environmental protections and show no signs of slowing down before Inauguration Day. At least one federal agency has been a bit more even handed. The Federal Energy Regulatory Commission's Republican majority has continued to place barriers in front of state renewable energy policies in the northeast quadrant of the country. On the other hand, it has opened the doors for low-carbon resources like battery storage, demand response, and distributed renewables to compete in interstate power markets. It has also begun to flirt with the idea of carbon pricing. When the Commission eventually flips to Democratic control, it will have a foundation for pursuing climate-friendlier policies.

On another happy note, Congress has continued to rebuff Trump's draconian budget requests, which are aimed at destroying federal programs having anything to do with the environment. The omnibus bill that Trump signed last night has some notable environmental provisions — in particular, the phase down of HFCs, a super-potent greenhouse gas.

State governments. State legislatures were out of commission for half the year or focused on dealing with the COVID pandemic and its repercussions. Still, there were many high notes:

Here's what happened at the state level.

- In **Arizona**, the utilities regulator mandated 100% carbon-free energy by 2050.
- Hawaii enacted SB-2629 "banning" coal fired power plants by 2023.
- In **Louisiana**, the governor signed an executive order in August 2020 to set goal of net zero GHG emissions by 2050.
- **Nevada** voters reaffirmed a constitutional requirement to have a renewable portfolio of at least 50 percent by 2030.
- **Oregon** shut down its last coal-fired plant 2020.
- In Pennsylvania, the Governor issued EO committing to join RGGI, the East Coast carbon trading system.
- **Rhode Island:** An executive order set the goal of 100% renewable energy by 2030.
- **Virginia** passed the Clean Economy Act, which mandates 100% carbon-free electricity by 2045 for Dominion Utility and 100% carbon-free electricity by 2050 for Appalachian Power Co.
- **Washington State** updated its climate targets: 45% below 1990 levels by 2030, 70% below 1990 levels by 2040, and net zero, or 95% below 1990 levels by 2050.

The private sector. I won't try to discuss everything climate related happening in the private sector — there's far too much. One symbolic event: Exxon was booted out of the Dow Jones Average, and the largest company in the U.S. energy sector is now NextEnergy, a clean energy firm. Some of the big oil companies are now talking openly about pivoting to other energy-related work. The pandemic may have accelerated this trend, given that oil prices briefly went negative earlier in the year, but the writing has been on the wall for years.

In not-unrelated news, auto companies doubled down on their electric vehicle strategies. GM announced it would have thirty models of electric vehicles on the market by 2025.

These developments outside the federal government create a favorable environment for Biden to move forward on climate policy. Not such a good year in other dimensions, including over 250,000 deaths from COVID-19. Hopefully 2021 will be much improved on all fronts.