

Coal is just about the worst possible way of generating electricity in terms of its climate impacts. It's also a serious public health hazard due to the particulates, sulfur dioxide, and nitrogen oxides it produces. Thus, reducing the use of coal is a high priority. How did we do in 2019? The short answer is that progress has continued, but there's a lot more that needs to be done. Still, considering that for the past three years we've had a President who proclaims his love of "clean, beautiful coal," it's impressive that coal is continuing its decline. We need stronger policies to accelerate this process, and we also need assistance for the coal miners who will need training for new jobs.

U.S. Coal-Fired Generation

The share of coal in U.S. electricity generation has been on a sharp downward trend. According to the [Energy Information Agency](#), "[b]etween 2010 and the first quarter of 2019, U.S. power companies announced the retirement of more than 546 coal-fired power units, totaling about 102 gigawatts (GW) of generating capacity. Plant owners intend to retire another 17 GW of coal-fired capacity by 2025." In 2018, coal-fired power plants produced 27% of U.S. electricity. That's down from 39% in 2014. In April 2019, renewables (including hydro) surpassed coal for the first time as a power source. Falling renewables costs threaten to match the cheapest coal power.

The trends give every sign of continuing. Coal use is [projected](#) to fall again in 2020. Wyoming's largest utility has announced plans to close five coal-fired plants by 2028. In Texas, wind power is expected to exceed coal in 2020. In the Southeast, three-fourths of Duke Power's coal plants ran less than half the time in 2018, and the utility has announced more plant retirements as a result. Duke has also announced its intent to decarbonize entirely by 2050. Most of the really weak plants have already been forced out, so the process may slow if we really solely on economic forces to address the problem. Nevertheless, no one is building new coal plants, so there is nowhere for coal to go but down. Bob Murray is one of Trump's closest advisors and has been a moving force behind the Administration's efforts to rescue coal. Yet his company just filed for bankruptcy.

The U.S. Coal Industry in 2019

In terms of coal production, the basic picture seems to be that coal production went up slightly in 2017 to 774 million tons, from 728 million tons the year before. Production in 2018 went down to 756 million tons. The [Energy Information Agency](#) only has numbers so far for the first half of 2019, but it looks like there's probably going to be another 20 million ton decline for the year as a whole, taking production back nearly to the same level as when Trump took office. Digging a little deeper, we see a clear picture of declining U.S.

consumption. There was a very rapid decline from 2014 to 2016. Since then, the decline has slowed but has continued without interruption. The last year of the Obama's presidency, U.S. coal consumption was 731 million tons. Judging from the first half of the year, total consumption in 2019 looks to be in the neighborhood of 600 million, down from 688 million in 2018. Just for comparison purposes, in 2013 the number was 924 million, so consumption is down about one-third over the past seven years.

Clearly, U.S. coal production hasn't fallen nearly as fast as our coal consumption. Exports are the reason. The amount of exports nearly doubled between 2016 and 2018, which was enough to give production its upward bump in 2017 and then cushion the decline since then. Exports in 2019 seem to be down a bit, but still far above the 2016 level.

Changes in U.S. production don't translate ton for ton into changes in global production. Some of the U.S. production displaces more expensive production that might otherwise have taken place elsewhere. Still, in terms of cutting global emissions, we really need to directly address U.S. production and reduce the flow of exports. That obviously won't happen with this Administration, but it does need to happen, and soon.