

When Bush ran for President in 2000, he endorsed mandatory limits on CO<sub>2</sub> emissions.

Within three months of taking office, he reversed himself to the dismay of some members of his own administration. The upshot was that the US resisted any effort to address climate change and embraced a “drill baby drill” energy policy. You can blame Bush. Or if you prefer, you can blame the nefarious influence of Dick Cheney or perhaps the five Justices who put Bush in the White House.

There’s no way of knowing how history would have played out if Bush had kept his word (or if Gore had won, for that matter). One way of getting a handle on the amount of harm, though, is to assume that if Bush had kept his promise, emissions during his presidency would have declined as much as they did under his successor Obama. True, the world was different in many ways in 2008 when Obama took office, including the energy sector. Some of those changes, like cheaper natural gas due to greater use of fracking, helped emissions decline under Obama. On the other hand, Bush might have been able to do more in regulatory terms than Obama, given that Bush would have had bipartisan support. Assuming parity between the two is a reasonably plausible, though ultimately unprovable, assumption.

Given that assumption, we can roughly calculate the harm done by Bush. Carbon emissions stayed about constant under Bush, with an average around 5.6 billion tons per year. Under Obama, the amount declined on a more or less straight line to about 4.9 billion by the time he left office, about a 13% cut. The total amount of reduced emissions during the course of Obama’s term was in the neighborhood 2.8 billion tons. That would have been equivalent to eliminating all emissions for six months of Bush’s term.

We can also take a rough stab at monetizing the amount of resulting harm. The social cost of carbon is an estimate of the harm done by one additional ton of carbon dioxide. The earliest government estimate of the social cost of carbon was for 2010: \$21/ton with a 3% discount rate and \$35 at a 2.5% discount rate. Don’t worry if you’re not sure what “discount rate” means; it really doesn’t matter for present purposes. Given the roughness of this entire exercise, I’ll just use the average of the 2010 figures, \$28 per ton. (Because of discounting, this figure should be adjusted downwards for earlier years, but then adjusted upwards to convert 2010 dollars to current dollars, which would probably cancel out.) The upshot is that the social cost of the excess Bush emissions is something like \$28/ton times 2.8 billion tons, or \$78.4 billion in 2010 dollars.

This may be a better way to see the significance of 2.8 billion tons: The average gas powered car today produces about 55 tons of carbon over its dozen-year life. So the first 50 million electric vehicles sold in the US will basically go toward offsetting Bush’s

contribution to climate change.

For several reasons, the true amount of harm caused by Bush was probably much greater. My calculation probably underestimates the impact of Obama's policies on emissions. It took the Obama Administration time to gear up its regulatory efforts, so the Bush policies were in effect for part of his Administration — emissions that should really be assigned to Bush rather than Obama. Moreover, some Obama regulations such as fuel efficiency rules continued to result in additional emissions reductions after he left office, and he should get credit for those. Finally, Bush's actions may well have discouraged emission reductions by other countries who saw that the US was doing nothing, while Obama's efforts may have encouraged those countries.

In any event, what we do know is that there are probably at least 2.8 billion tons of carbon with Bush's name on them that will be causing global warming for the next century or two. A lasting legacy but not one to be proud of.