
The United States and the Paris Climate Agreements - What Does the Data Say?

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As the Biden Administration prepares to take office with a platform pledging both to respect science and to rejoin the Paris Climate Agreements, a review of the actual data appears in order.

Starting from a baseline on 2005 (which was also used by the Paris Agreement), CO2 emissions in the USA are down approximately 12%.

Some part of that improvement undoubtedly is due to increased use of renewable sources like solar and wind, but the overwhelming majority of that decrease has been caused by the change from coal based energy production to natural gas, facilitated greatly by fracking.

In 2020, American CO2 emissions are likely to drop another 10%. This would put the United States right on target, if not ahead of schedule, to meet American commitments under the Paris Climate Agreements (known as "NDCs," for Nationally Determined Contributions). Specifically, under the Paris Agreements, the United States pledged a reduction in CO2 emissions of 26-28% by 2025 from the 2005 baseline.

Nearly everyone agrees that the 2020 reduction mostly results from the pandemic, but regardless, this overall decrease in CO2 emissions is far and away the best performance of any country in the world. Thus, even though right now the United States has opted out of the Paris Agreements, the country is actually on target to meet its NDC for CO2.

However, if the United States succeeds in handling COVID-19, the Energy Information Association estimates that American emissions will rise, again, due to increased economic activity. This could be by as much as 6%, reducing the United States' CO2 reduction to only 16% from the 2005 baseline.

However, had the United States continued building out its pipeline infrastructure, that anticipated 2021 increase would not be as severe, as fewer homes and businesses would return to coal instead of switching to natural gas. But thanks largely to political pressure, mostly from the environmental movement, fewer new oil and gas pipelines are being constructed, therefore reducing the ability of many places to switch from coal.

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Many on the environmental side demand that instead of building new fossil fuel infrastructure the United States should dramatically and immediately increase the use of "renewables." To get there, an apparent strategy of the environmentalist community has been to oppose pipelines with the goal of thwarting the conversion from coal to natural gas as much as possible – thereby hoping to facilitate a market driven increase in the availability of renewables.

However, the clear problem with this strategy remains science and infrastructure. Given the limits of current scientific technology, there is simply no way fully to replace the energy that would be lost from fossil fuels with energy only or mainly from renewable sources – at least not at present and for some considerable time to come. Wind and solar are intermittent, and to assure their round the clock availability, massive and expensive new electrical storage batteries or other devices must be designed and built on a scale never before seen. Likewise, the electrical grid itself must be upgraded on a major scale to allow the transmission of electricity from many new smaller renewable sources as a replacement for the centralized system of large power plants that has been and is still the current model. The simple reality is that, in 2020, mankind continues to lack the scientific and technological capability both to store the amount of energy that we need and to transmit it where it needs to go when it needs to be there.

Of course, in order to further analyze the environmental impacts of natural gas use and increased fracking, one must factor in the increase in methane related to oil and natural gas generation. Without getting too technical, methane is a more intensive greenhouse gas than CO₂ but it also dissipates in the atmosphere much more quickly than CO₂. Thus, one can hear that methane is 84 times more intensive a fossil fuel than CO₂ and also that methane is 30 times more intensive, and both can be correct. It's a function of the time horizon in which you're measuring. What is not in doubt, however, is that in talking about emissions and climate change, the impact of CO₂ far outweighs that of methane because there is so much more CO₂ in the atmosphere.

The bottom lines, then, are these:

1. The United States is presently doing better than any other country in the world at reducing CO₂ emissions, thanks mainly to the increased use of natural gas.
2. The United States is doing better than any other country in the world which gave a significant NDC for CO₂ under the Paris Climate Agreements, and it is doing so without attempting to ban the use of fossil fuels.
3. The argument can be made that by insisting on an "all or nothing" approach and holding up the interstate pipeline buildout, the American environmental community is actually hurting the environment instead of helping it, by delaying the conversion from coal to more efficient and cleaner burning natural gas.

As with many issues facing Americans in 2020, there are extreme positions on both sides of the debate, but there also appears to be a balanced approach that would best serve the environment overall. That would be to continue to encourage the short term switch from coal to natural gas while, in the long term, continue to subsidize and encourage research about, and the steady conversion to, solar, wind and other new types of so-called renewable energy. Hopefully, in the reasonable long term, the increasing availability of these new types of energy, aided by the necessary infrastructure to store and deliver them, can wean us off of fossil

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fuels entirely.

Therefore, the major energy question facing the incoming Biden Administration is simple: Will it seek that commonsensical balanced approach, or will it opt for something more extreme that may not actually be what the American people and economy want and require?

ATTORNEYS MENTIONED

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