

U.S. greenhouse gas emissions spiked in 2018 — and it couldn't happen at a worse time

By [Chris Mooney](#) and [Brady Dennis](#)

January 8 2019

U.S. carbon dioxide emissions rose an estimated 3.4 percent in 2018, according to new research — a jarring increase that comes as scientists say the world needs to be aggressively cutting its emissions to avoid the most devastating effects of climate change.

The findings, published Tuesday by the independent economic research firm Rhodium Group, mean that the United States now has a diminishing chance of meeting its pledge under the 2015 Paris climate agreement to dramatically reduce its emissions by 2025.

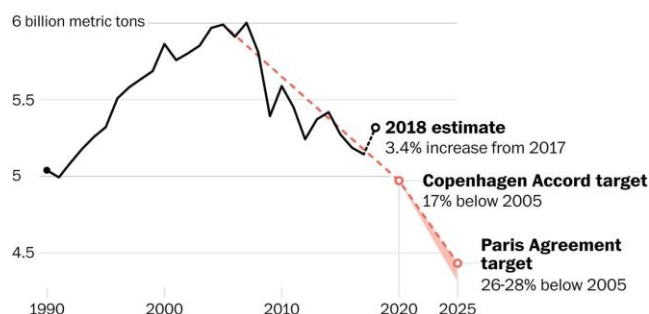
The findings also underscore how the world's second-largest emitter, once a global leader in pushing for climate action, has all but abandoned efforts to mitigate the effects of a warming world. President Trump has said he plans to officially withdraw the nation from the Paris climate agreement in 2020 and in the meantime has rolled back Obama-era regulations aimed at reducing the country's carbon emissions.

“We have lost momentum. There's no question,” Rob Jackson, a Stanford University professor who studies emissions trends, said of both U.S. and global efforts to steer the world toward a more sustainable future.

The sharp emissions rise was fueled primarily by a booming economy, researchers found. But the increase, which could prove to be the second-largest in the past 20 years, probably would not have been as stark without Trump administration rollbacks, said Trevor Houser, a partner at Rhodium. “I don't think you would have seen the same increase,” Houser said, referring to the electric power sector in particular.

U.S. drifts farther from emissions targets

Energy-related CO₂ emissions are estimated to have increased in 2018



Note: Energy-related CO₂ emissions represent roughly three-quarters of all U.S. greenhouse gas emissions.

Source: Rhodium Group

JOHN MUYSKENS/THE WASHINGTON POST

Emissions from electric power generation rose 1.9 percent in 2018, the analysis found, driven chiefly by more demand for electricity, which was largely satisfied by more burning of natural gas. This fuel emits less greenhouse gas than coal when burned but is still a major contributor overall.

At the same time, emissions from the transportation sector rose 1 percent thanks to more airline travel and greater on-road shipping. Industrial emissions from factories and other major facilities also rose significantly

in 2018, the analysis found.

The figures, based on data from the U.S. Energy Information Administration and other sources, remain an estimate because some data from last year is not finalized. But the trend line is consistent

with a recent estimate from a group of academics associated with the Global Carbon Project, which found U.S. emissions likely to rise 2.5 percent in 2018.

Rising emissions are not just a U.S. problem. Global emissions also reached a record high in 2018, and the increase in the United States goes hand in hand with rising emissions in other countries, such as China and India, said Michael Mehling, deputy director of the Center for Energy and Environmental Policy Research at the Massachusetts Institute of Technology.

“It’s not an isolated phenomenon,” Mehling said, adding that the trend makes it difficult to solely blame the Trump administration’s deregulatory push and its dismissal of climate action for the change. “Such political developments, including the rollback of domestic climate policies in the U.S., tend to have a considerable lead time before you can actually see their reflection in physical emission trends.”

The latest growth makes it increasingly unlikely that the United States will achieve a pledge made by the Obama administration in the run-up to the Paris climate agreement, that the country would reduce its greenhouse gas emissions by 26 to 28 percent below 2005 levels by the year 2025.

A large part of President Barack Obama’s plan for meeting that goal turned on key climate policies, including new regulations for vehicle fuel efficiency and power plants. These policies alone were not enough — the United States has never been on target to fulfill its Paris promises. But the Trump administration has moved to reverse or weaken them.

U.S. emissions have declined somewhat since 2005 because of technological changes, such as the dwindling of coal-fired power generation in the face of surging natural gas and the growth of renewable energy. In a major international climate change meeting in Poland last month, the Trump administration hailed a 14 percent decline in emissions from 2005 levels.

But that’s barely half of what the Obama administration was promising by 2025. And the 14 percent figure has shrunk based on the latest findings. The result is that any chance of hitting the original Obama goal has diminished, said the Rhodium Group’s Houser.

The latest emissions data comes as the world’s scientists have called the global climate problem more urgent than previously thought — making the United States’ emissions trends and its path to withdraw from the Paris agreement more consequential.

In October, a United Nations-backed panel of nearly 100 scientists offered a detailed accounting of what it would take to limit planetary warming to just 1.5 degrees Celsius (2.7 degrees Fahrenheit) — with the world already experiencing a 1 degree Celsius increase. They found not only that going beyond 1.5 degrees Celsius would have devastating impacts, but also that the world has only about a decade to make the “unprecedented” changes necessary to hold warming at this level.

At the Poland climate meeting, the United States joined three countries to oppose a proposal to embrace the study from the U.N. Intergovernmental Panel on Climate Change. All were economies heavily reliant on fossil fuels — Saudi Arabia, Kuwait and Russia.

Just as scientists have made clear the world needs to act with urgency, the United States has headed in the opposite direction. In 2020, even as many other countries have said they intend to ramp up their climate ambitions, the Trump administration is expected to be poised to complete its planned withdrawal from the Paris agreement.

In the United States, “it’s very unlikely that anything will happen with setting new targets or moving on climate by 2020,” said Johan Rockström, director of the Potsdam Institute for Climate Impact Research in Germany. “Which is a big risk, given that we have to bend the curve by 2020.”

In Poland, countries decided to acknowledge the report's "timely completion" but removed a prior reference to its most inconvenient finding — that a world responsible for more than 50 billion tons of total carbon dioxide equivalent emissions in 2018 must make a monumental shift in the course of the coming decade.

"What you've got is the United States on the top of a pyramid of fragmentation and creating space to legitimize that type of behavior on the part of other countries," said David Wirth, a former climate negotiator who is now a law professor at Boston College.

The key issue now is how all of this plays out over the next two years, leading up to 2020. That is both the year when the United States can formally exit the Paris climate agreement and the year when member countries need to announce more-ambitious climate plans.

That leaves a world facing a make-or-break decade for emissions reductions still unsure of exactly what role the United States will play, if any.

"Other countries are going to be looking at the [2020 presidential] campaign," Wirth said. "If you've got all presidential candidates with the exception of one running for election saying, 'I'm prepared to commit to bigger reductions,' then that will resonate."