

Trump administration sees a 7-degree rise in global temperatures by 2100

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September 28

Last month, deep in a 500-page [environmental impact statement](#), the Trump administration made a startling assumption: On its current course, the planet will [warm a disastrous seven degrees](#) by the end of this century.

A rise of seven degrees Fahrenheit, or about four degrees Celsius, compared with preindustrial levels would be catastrophic, according to scientists. Many coral reefs would dissolve in increasingly acidic oceans. Parts of Manhattan and Miami would be underwater without costly coastal defenses. Extreme heat waves would routinely smother large parts of the globe.

But the administration did not offer this dire forecast, premised on the idea that the world will fail to cut its greenhouse gas emissions, as part of an argument to combat climate change. Just the opposite: The analysis assumes the planet's fate is already sealed.

The draft statement, issued by the National Highway Traffic Safety Administration (NHTSA), was written to justify President Trump's decision to freeze federal fuel-efficiency standards for cars and light trucks built after 2020. While the proposal would increase greenhouse gas emissions, the impact statement says, that policy would add just a very small drop to a very big, hot bucket.

"The amazing thing they're saying is human activities are going to lead to this rise of carbon dioxide that is disastrous for the environment and society. And then they're saying they're not going to do anything about it," said Michael MacCracken, who served as a senior scientist at the U.S. Global Change Research Program from 1993 to 2002.

The document projects that global temperature will rise by nearly 3.5 degrees Celsius above the average temperature between 1986 and 2005 regardless of whether Obama-era tailpipe standards take effect or are frozen for six years, as the Trump administration has proposed. The global average temperature rose more than 0.5 degrees Celsius between 1880, the start of industrialization, and 1986, so the analysis assumes a roughly four degree Celsius or seven degree Fahrenheit increase from preindustrial levels.



The world would have to make deep cuts in carbon emissions to avoid this drastic warming, the analysis states. And that “would require substantial increases in technology innovation and adoption compared to today’s levels and would require the economy and the vehicle fleet to move away from the use of fossil fuels, which is not currently technologically feasible or economically feasible.”

The White House did not respond to requests for comment.

World leaders have pledged to keep the world from warming more than two degrees Celsius compared with preindustrial levels, and agreed to try to keep the temperature rise to 1.5 degrees Celsius. But the current greenhouse gas cuts pledged under the 2015 Paris climate agreement [are not steep enough to meet either goal](#). Scientists predict a four degree Celsius rise by the century’s end if countries take no meaningful actions to curb their carbon output.

Trump has vowed to exit the Paris accord and called climate change a hoax. In the past two months, the White House has pushed to dismantle nearly half a dozen major rules aimed at reducing greenhouse gases, deregulatory moves intended to save companies hundreds of millions of dollars.

If enacted, the administration’s proposals would [give new life to aging coal plants](#); allow oil and gas operations to [release more methane into the atmosphere](#); and prevent new curbs on [greenhouse gases used in refrigerators](#) and air-conditioning units. The [vehicle rule](#) alone would put 8 billion additional tons of carbon dioxide in the atmosphere this century, more than a year’s worth of total U.S. emissions, according to the government’s own analysis.

Administration estimates acknowledge that the policies would release far more greenhouse gas emissions from America's energy and transportation sectors than otherwise would have been allowed. The statement is the latest evidence of deep contradictions in the Trump administration's approach to climate change.

Despite Trump's skepticism, federal agencies conducting scientific research have often reaffirmed that humans are causing climate change, including in a major 2017 report that found "no convincing alternative explanation." In one internal White House memo, officials wondered whether it would be best to simply "ignore" such analyses.

In this context, the draft environmental impact statement from NHTSA — which simultaneously outlines a scenario for very extreme climate change, and yet offers it to support an environmental rollback — is simply the latest apparent inconsistency.

David Pettit, a senior attorney at the Natural Resources Defense Council who testified against Trump's freeze of car mileage standards Monday in Fresno, Calif., said his organization is prepared to use the administration's own numbers to challenge its regulatory rollbacks. He noted that NHTSA document projects that if the world takes no action to curb emissions, current atmospheric concentrations of carbon dioxide would rise from 410 parts per million to 789 ppm by 2100.

"I was shocked when I saw it," Pettit said in a phone interview. "These are their numbers. They aren't our numbers."

Conservatives who condemned President Barack Obama's climate initiatives as regulatory overreach have defended the Trump administration's approach, calling it a more reasonable course.

Obama's climate policies were costly to industry and yet "mostly symbolic," because they would have made barely a dent in global carbon dioxide emissions, said Heritage Foundation research fellow Nick Loris, adding: "Frivolous is a good way to describe it."

NHTSA commissioned ICF International Inc., a consulting firm based in Fairfax, Va., to help prepare the impact statement. An agency spokeswoman said the Environmental Protection Agency "and NHTSA welcome comments on all aspects of the environmental analysis" but declined to provide additional information about the agency's long-term temperature forecast.

Federal agencies typically do not include century-long climate projections in their environmental impact statements. Instead, they tend to assess a regulation's impact during the life of the program — the years a coal plant would run, for example, or the amount of time certain vehicles would be on the road.

Using the no-action scenario "is a textbook example of how to lie with statistics," said MIT Sloan

School of Management professor John Sterman. “First, the administration proposes vehicle efficiency policies that would do almost nothing [to fight climate change]. Then [the administration] makes their impact seem even smaller by comparing their proposals to what would happen if the entire world does nothing.”

This week, U.N. Secretary-General António Guterres warned leaders gathered in New York, “If we do not change course in the next two years, we risk runaway climate change . . . Our future is at stake.”

Federal and independent research — including projections included in last month’s analysis of the revised fuel-efficiency standards — echoes that theme. The environmental impact statement cites “evidence of climate-induced changes,” such as more frequent droughts, floods, severe storms and heat waves, and estimates that seas could rise nearly three feet globally by 2100 if the world does not decrease its carbon output.

Two articles published in the journal *Science* since late July — both co-authored by federal scientists — predicted that the global landscape [could be transformed](#) “without major reductions in greenhouse gas emissions” and declared that soaring temperatures worldwide bore humans’ [“fingerprint.”](#)

“With this administration, it’s almost as if this science is happening in another galaxy,” said Rachel Cleetus, policy director and lead economist for the Union of Concerned Scientists’ climate and energy program. “That feedback isn’t informing the policy.”

Administration officials say they take federal scientific findings into account when crafting energy policy — along with their interpretation of the law and Trump’s agenda. The EPA’s acting administrator, Andrew Wheeler, has been among the Trump officials who have noted that U.S. emissions of carbon dioxide and other pollutants have fallen over time.

But the debate comes after a troubling summer of devastating wildfires, record-breaking heat and a catastrophic hurricane — each of which, federal scientists say, signals a warming world.


Some Democratic elected officials, such as Washington Gov. Jay Inslee, said Americans are starting to recognize these events as evidence of climate change. On Feb. 25, Inslee met privately with several Cabinet officials, including then-EPA chief Scott Pruitt, and Western state governors. Inslee accused them of engaging in “morally reprehensible” behavior that threatened his children and grandchildren, according to four meeting participants, who spoke on the condition of anonymity to provide details of the private conversation.

In an interview, Inslee said that the ash from wildfires that covered Washington residents’ car hoods this summer, and the acrid smoke that filled their air, has made more voters of both parties grasp the real-world implications of climate change.

“There is anger in my state about the administration’s failure to protect us,” he said. “When you taste it on your tongue, it’s a reality.”


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