

Newsweek

## Trump's Energy Policies Could Affect Air Quality in 2050, Say Scientists

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The Donald Trump administration's energy policies combined with the effects of climate change will cause air quality to decline in the U.S., say scientists writing in journal *One Earth*. Their research suggests the effects of actions taken today will still be felt by Americans in 2050.

The current administration is pursuing an energy policy focused on fossil fuels, Robert Ukeiley, a senior attorney at the Center for Biological Diversity told Newsweek. "The result is the United States gets dirtier air and we get to pay more money for the dirty energy being provided."

Air quality tends to be overlooked, said first author Huizhong Shen, a postdoctoral fellow in the School of Civil and Environmental Engineering at Georgia Institute of Technology. "Past research has focused mostly on the link between energy policies and greenhouse gas emissions," he said in a statement.

The research focuses on ground-level ozone—a substance created when human-made emissions of nitrogen oxide and other volatile organic compounds interact with heat and sunlight. This makes it a secondary pollutant and thus, much harder to manage.

In contrast to stratospheric ozone (that which begins at approximately 6 miles above the Earth's surface), ground-level ozone is damaging to the health of humans, plants and animals, and has been linked to respiratory problems such as asthma, emphysema and lung damage.

The study hinges on the relaxation of federal policies such as the Clean Power Plan, Production Tax Credit, Investment Tax Credit and the Corporate Average Fuel Economy standards on cars. This particular set of policies was selected because they have been in the news and because they are geared toward the power and transportation sector—"two of the largest energy consumers and polluters in the country," said Shen.

The result, they calculate, would contribute an additional 6.5 percent nitrogen oxide compared to the current scenario, a situation that will affect some regions (like the Great Lakes) more than others (like California). Add climate change into the equation and air quality could deteriorate even further.

The number of counties that fail to achieve the current ozone safety standard of 0.070 parts per million (or less) in 2050 is predicted to be 63 to 81 percent greater than it would be under an alternative

scenario. In that alternative scenario energy policies would not be relaxed and there would be no climate change.

That is equivalent to an extra 17 or 22 counties (under RCP 4.5 and RCP 8.5 respectively), the study's authors said.

"We should view air pollution...like polio; something to be eliminated," said Ukeiley. "Trump has definitely set us back from where we can and should be in terms of providing everyone with clean, healthy air to breathe but there are other forces mitigating Trump's impact."

However, he questions the accuracy of the calculations presented in the study. On one hand, history shows climate models are frequently overoptimistic and have to be amended. So the effect of climate change on ozone may be more severe than current climate models would suggest. But on the other, the current Administration isn't very good at rolling back environmental regulations, said Ukeiley.

Some attempts to roll back environmental regulations—like the Corporate Average Fuel Economy (CAFE) standards—are facing stiff competition from courts and state governments. While, others—like the repeal of the Clean Power Plan—stand in opposition to state policies and market forces (like the Regional Greenhouse Gas Initiative) and as such, might not have as much of an effect as they would otherwise.

"Trump is trying to make U.S. residents and industry pay more to subsidize dirty fossil fuels and they just aren't standing for it," said Ukeiley.

Large companies, like Apple and Facebook, are committing to clean energy goals and states, like New Mexico, are setting zero-carbon targets. What's more, the current administration won't be in power in 2050.

"It is really the missed opportunities which are the greatest tragedy under Trump," said Ukeiley. "Under Trump, not one major rule has come out to reduce air pollution. Rather, the Trump administration is too busy ineptly trying to rollback existing rules, often times over the objection of the very industries being regulated."