

Study: Pandemic's cleaner air added heat to warming planet

By Seth Borenstein, AP Science Writer
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Earth spiked a bit of a fever in 2020, partly because of cleaner air from the pandemic lockdown, a new study found.

For a short time, temperatures in some places in the eastern United States, Russia and China were as much as half to two-thirds of a degree (.3 to .37 degrees Celsius) warmer. That's due to less soot and sulfate particles from car exhaust and burning coal, which normally cool the atmosphere temporarily by reflecting the sun's heat, Tuesday's study in the journal *Geophysical Research Letters* reported.

Overall, the planet was about .05 degrees (.03 degrees Celsius) warmer for the year because the air had fewer cooling aerosols, which unlike carbon dioxide is pollution you can see, the study found.

"Cleaning up the air can actually warm the planet because that (soot and sulfate) pollution results in cooling" which climate scientists have long known, said study lead author Andrew Gettelman, an atmospheric scientist at the National Center for Atmospheric Research. His calculations come from comparing 2020 weather to computer models that simulated a 2020 without the pollution reductions from pandemic lockdowns.

This temporary warming effect from fewer particles was stronger in 2020 than the effect of reduced heat-trapping carbon dioxide emissions, Gettelman said. That's because carbon stays in the atmosphere for more than a century with long-term effects, while aerosols remain in the air about a week.

Even without the reduction in cooling aerosols, global temperatures in 2020 already were flirting with breaking yearly heat record because of the burning of coal, oil and natural gas — and the aerosol effect may have been enough to help make this the hottest year in NASA's measuring system, said top NASA climate scientist Gavin Schmidt, who wasn't part of this study but said it confirms other research.

"Clean air warms the planet a tiny bit, but it kills a lot fewer people with air pollution," Gettelman said.

[Bakersfield Californian Community Voices, Wednesday, Feb. 3, 2021](#)

It's time to speak up to prevent more air pollution and protect public health

By Bryan Osorio

Breathing clean air is our most basic human need. But the city of Delano has some of the worst air in California, according to a state health screening tool. Air pollution exposes everyone in Delano to health risks. I chose to serve my hometown, as a city councilperson and now as mayor, to fight for social justice for the people in my community. I feel a responsibility to speak up now to defend my community's right to breathe clean air.

We are at a turning point, and it is time to take a stand. If our Kern County leaders approve a massive oil and gas drilling proposal, being reviewed Feb. 11 by the Planning Commission, their decision will lead to dangerous health implications for all Kern communities.

The Kern County Planning Commission is considering a proposal to add 67,000 new oil and gas wells in Kern County over the next 20 years — including in areas around Delano. Air pollution knows no boundaries. Oil and gas drilling in Kern County has already significantly impacted the air we breathe. This ordinance was struck down in court once before, for not providing adequate environmental and public health protections to our communities. Now the county is trying to pass the ordinance again, with no significant changes.

The greater Delano area is ranked in California's highest pollution risk category, according to the California Communities Environmental Health Screening Tool (CalEnviroScreen). Heavy truck traffic, factory emissions, pesticide spraying and countywide oil and gas drilling, combined with the geography of the land, all contribute to our bad air quality. The consequences are frightening.

Delano residents suffer high rates of chronic health problems brought on by all this air pollution. Oil and gas drilling releases a toxic soup of chemicals and tiny particles, called particulates, that get into our lungs and stick there. Scientific studies show a direct link between this drilling and a long list of health

problems, from chronic asthma and cancers to preterm births. Adding more oil drilling pollution to the existing high level of pollution in Delano will just make things worse.

As if that wasn't enough, studies by Harvard University and others have found that long-term exposure to the particulate matter in air pollution is linked to a higher risk of dying from COVID-19. Delano has been especially hard hit by the pandemic.

The last thing our community needs is more air pollution. The studies linking air pollution to COVID deaths highlight just how dangerous oil drilling is to public health.

Latinos, who make up a large percentage of Delano's population, are being hit hard both by COVID-19 and air pollution. People in low-income communities are also disproportionately affected by COVID-19 and by air pollution. Given our demographics and the fact that we have a poverty rate of 25 percent, it's no surprise that we're feeling the brunt of these problems.

It doesn't have to be this way. Renewable energy and other green jobs are on the rise; they are the future of economic growth across Kern County.

And the need for plugging and cleaning up old oil wells offers a way to transition to a green energy economy. Oil well clean-up could create more than 9,000 good-paying jobs over the next 10 years.

Let's put pressure on county officials to focus the county's resources, not on a declining industry that makes a few affluent people richer while making the rest of us sick, but instead, on creating good-paying, sustainable jobs that will keep our families safe and our economy strong. We need our leaders to prioritize public health, now more than ever.

To make your voice heard: The Kern County Planning Commission is meeting to review the proposed oil and gas ordinance Feb. 11. Kern County residents can call 1-844-332-1339 any time before Feb. 11 to voice their opposition to more oil and gas drilling.

They can also register with the county by Feb. 10 (call 661-862-8647) to attend and speak at the virtual Planning Commission meeting. Let's speak up now to create the future we want for our families and our community.