

CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, Jeff Merkley, and Brian Schatz
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Even In Sunny L.A., Warming Climate May Be Next Big Public Health Problem



By 2050, the Los Angeles area is expected to warm by five degrees on average. Higher temperatures will create more smog, leading to more asthma and cardiovascular disease, including heart attacks. Angelenos will also suffer through more extreme heat, which already accounts for more deaths annually nationwide than flood, storms and lightning combined. In downtown L.A., there could be 22 days of extreme heat a year by 2050, up from an annual average of six days recorded from 1981 to 2000. According to Elizabeth Rhoades, climate change lead for the L.A. County Department of Public Health, when a heat wave struck California in 2006, with temperatures in the triple-digits for more than a week, 650 Californians died. That's in part because heat exacerbates existing medical conditions, such as diabetes and liver problems, she said. One of the ways to mitigate these effects is to reduce the heat captured in cities. In highly urbanized neighborhoods, heat tends to get trapped, absorbed by the concrete and pavement of roads and buildings. That phenomenon, known as the urban heat island effect, can increase temperatures by as much as 20 degrees over what they would otherwise be. L.A.'s sustainability plan aims to reduce the city's urban heat island effect by 1.7 degrees by 2025. Experts say focusing on urban heat island effect could bring significant benefits. ([LA Times](#))

The Heat Goes On: Earth Sets 9th Straight Monthly Record

The January figures are in, and Earth's string of hottest-months-on-record has now reached nine in a row. But NASA said January stood out: The temperature was above normal by the highest margin of any month on record. NASA said January 2016 was 2.03 degrees Fahrenheit (1.13 degrees Celsius) above normal. The National Oceanic and Atmospheric Administration, which calculates temperatures differently, said last month was 1.87 degrees (1.04 degrees Celsius), which is the second biggest margin in history. NOAA said the greatest was this past December. January's average global temperature was a record 55.5 degrees Fahrenheit (13 degrees Celsius), easily beating the old January record set in 2007, according to NOAA. There were colder-than-normal patches in parts of the United States, Europe and Asia in January, but they were overwhelmed by incredible "off our chart" warming in the Arctic region, according to NOAA climate scientist Dr. Jessica Blunden. Siberia, northwest Canada, and a lot of Alaska were at least 9 °F warmer than normal, she said. NASA chief climate scientist Dr. Gavin Schmidt blamed the record heat mostly on man-made climate change, with an assist from El Nino. ([AP](#))

Cutting Carbon Would Prevent Premature Deaths

Limiting U.S. carbon dioxide emissions would save thousands of people from premature death thanks to related benefits stemming from reductions in other air pollutants, according to a new study published in the journal *Nature Climate Change*. The study found that putting the United States on a "clean energy" path could prevent up to 175,000 premature deaths. Health benefits could be as high as \$250 billion a year, up to 10 times greater than the costs of carbon-cutting policies, the research found. "Many people view climate change as a future problem, but our analysis shows that reducing emissions that cause warming -- many of which also contribute to air pollution -- would benefit public health here and now," Dr. Drew Shindell, professor of climate sciences at Duke University's Nicholas School of the Environment, said in a statement. The researchers modeled what they said were technically feasible "clean transportation" and "clean energy" scenarios that would reduce CO2 emissions by 75 and 63 percent, respectively. By 2030, the study's clean energy scenario would prevent up to 175,000 premature deaths, and 22,000 deaths a year afterward, according to the model. The modeled CO2 reductions in the transportation sector would prevent 120,000 premature deaths and another 14,000 a year after 2030. ([EENews](#))

Seas Are Now Rising Faster Than They Have In 2,800 Years

A group of scientists reconstructed the history of the planet's sea levels arcing back over some 3,000 years and concluded that the rate of increase experienced in the 20th century was "extremely likely" to have been faster than during nearly the entire period. "We can say with 95 percent probability that the 20th-century rise was faster than any of the previous 27 centuries," said Dr. Bob Kopp, a climate scientist at Rutgers University who led the research. Seas rose about 14 centimeters (5.5 inches) from 1900 to 2000, the new study suggests, for a rate of 1.4 millimeters per year. The current rate, according to NASA, is 3.4 millimeters per year, suggesting that sea level rise is still accelerating. Unsurprisingly, the study blames the anomalous 20th-century rise on global warming — and not just that. It also calculates that, had humans not been warming the planet, there's very little chance that seas would have risen so much during the century, finding that instead of a 14 centimeter rise, we would have seen somewhere between a 3 centimeter fall and a 7 centimeter rise. ([Washington Post](#))