

2016 set to break heat record despite slowdown in emissions

November 14 2016, by Karl Ritter



In this May 31, 2015 file photo, a woman cools herself on a hot summer day in Hyderabad, in the southern Indian state of Telangana. The U.N. weather agency said on Monday, Nov. 14, 2016, that 2016 is set to break the record for the hottest year since measurements began in the 19th century. (AP Photo/Mahesh Kumar A., File)

Global temperatures are soaring toward a record high this year, the U.N. weather agency said Monday, while another report showed emissions of a key global warming gas have flattened out in the past three years.

The reports injected a mix of gloom and hope at U.N. climate talks in Marrakech this week.

"Another year. Another record. The high temperatures we saw in 2015 are set to be beaten in 2016," said Petteri Taalas, the head of the World Meteorological Organization.

WMO's preliminary data through October showed world temperatures, boosted by the El Nino phenomenon, are 1.2 degrees Celsius (2.2 degrees Fahrenheit) above pre-industrial levels.

That's getting close to the limit set by the global climate agreement adopted in Paris last year. It calls for limiting the temperature rise since the industrial revolution to 2 degrees C or even 1.5 degrees C.

WMO said 16 of the 17 hottest years have occurred this century. The only exception was 1998, which was also an El Nino year.

Taalas said parts of Arctic Russia saw temperatures soaring 6-7 degrees C above average. "We are used to measuring temperature records in fractions of a degree, and so this is different," he said.

Environmental groups and climate scientists said the report underscores the need to quickly reduce emissions of carbon dioxide and other greenhouse gases blamed for warming the planet.



A girl carries a sign saying "Climate justice for all" as she takes part in a protest against climate change coinciding with the Climate Conference, known as COP22, taking place in Marrakech, Morocco, Sunday, Nov. 13, 2016. (AP Photo/Mosa'ab Elshamy)

Another report released Monday delivered some positive news, showing global CO₂ emissions have flattened out in the past three years. However, the authors of the study cautioned it's unclear whether the slowdown, mainly caused by declining coal use in China, is a permanent trend.

"It is far too early to proclaim we have reached a peak," said co-author Glen Peters, a senior researcher at the Center for International Climate and Environmental Research in Oslo.

The study, published in the journal *Earth System Science Data*, says

global CO₂ emissions from fossil fuels and industry are projected to grow just 0.2 percent this year.

That would mean emissions have leveled off at about 36 billion metric tons in the past three years even though the world economy has expanded, suggesting the historical bonds between economic gains and emissions growth may have been severed.

"This could be the turning point we have hoped for," said David Ray, a professor of carbon management at the University of Edinburgh, who was not involved with the study. "To tackle climate change those bonds must be broken and here we have the first signs that they are at least starting to loosen."



People participate in a protest against climate change, in a march coinciding with the Climate Conference, known as COP22, taking place in Marrakech, Morocco, Sunday, Nov. 13, 2016. (AP Photo/Mosa'ab Elshamy)

Chinese emissions were down 0.7 percent in 2015 and are projected to fall 0.5 percent in 2016, the researchers said, though noting that Chinese energy statistics have been plagued by inconsistencies.

Peters said it's unclear whether the Chinese slowdown was due to a restructuring of its economy or a sign of economic instability, but the unexpected emissions reduction "give us hope that the world's biggest emitter can deliver much more ambitious emission reductions."

China, which accounts for almost 30 percent of global carbon pollution, pledged to peak its emissions around 2030 as part of the climate pact adopted in Paris last year. Many analysts say China's peak is likely to come much earlier—and may already have occurred.

"A few more years of data is needed to confirm this," said Bill Hare of Climate Analytics.

Even if China's emissions have stabilized, growth in India and other developing countries could push global CO₂ levels higher again. India's emissions rose 5 percent in 2015, the study said.



Hundreds protest against climate change and urge world leaders to take action, in a march coinciding with the Climate Conference, known as COP22, taking place in Marrakech, Morocco, Sunday, Nov. 13, 2016. (AP Photo/Mosa'ab Elshamy)

The election of Donald Trump as president of the United States—the world's No. 2 carbon polluter—could also have an impact.

U.S. emissions fell 2.6 percent last year and are projected to drop 1.7 percent this year, as natural gas and renewables displace coal in power generation, the study showed. But it's unclear whether those reductions will continue under Trump, who has pledged to roll back the Obama administration's environmental policies, including the Clean Power Plan to reduce carbon pollution from power plants.

Obama's climate envoy, Jonathan Pershing, said Monday that China and other countries would move forward on climate action even if the U.S.

reverses course under Trump.

"I'm hearing the same from the Europeans," he said. "I'm hearing the same from the Brazilians. I'm hearing the same from Mexico, and from Canada, and from smaller nations like Costa Rica and from Colombia."

Some researchers stressed that it's not enough for global [emissions](#) to stabilize, saying they need to drop toward zero for the world to meet the goals of the Paris deal.



People raise flags of the Amazigh, indigenous people of Morocco, during a protest against climate change coinciding with the Climate Conference, known as COP22, taking place in Marrakech, Morocco, Sunday, Nov. 13, 2016. (AP Photo/Mosa'ab Elshamy)

"Worryingly, the reductions pledged by the nations under the Paris Agreement are not sufficient to achieve this," said [climate](#) scientist Chris Rapley of University College London.



Hundreds protest against climate change and urge world leaders to take action, in a march coinciding with the Climate Conference, known as COP22, taking place in Marrakech, Morocco, Sunday, Nov. 13, 2016. (AP Photo/Mosa'ab Elshamy)



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