

Turn Off the Heat!

Greenhouse gas levels hit a record high

By Laura Blackburn with TIME and AP reporting



Cyclists wears masks to protect themselves against heavy smog in Nanjing, China.

Levels of greenhouse gases trapped in Earth's atmosphere reached an all-time high in 2014, according to a new report by the World Meteorological Organization (WMO). The group's [findings](#) were released on Monday, November 9. (1)

Greenhouse gases, like carbon dioxide (CO₂), come from everyday activities such as turning on a light and driving around town. They are released in larger amounts by factories and farms. These gases trap heat in the atmosphere, which makes the Earth warmer. (2)

"We can't see CO₂," WMO Secretary-General, Michel Jarraud, said in a statement. "It is an invisible threat, but a very real one." (3)

The WMO reported that the amount of CO₂ in the atmosphere reached 397.7 parts per million (ppm) in 2014. In the Northern hemisphere it rose to above 400 ppm—a symbolic [milestone](#). Scientists say that CO₂ levels should stay below 400 ppm to avoid long-term climate issues, like heat waves and floods. (4)

"Carbon dioxide remains in the atmosphere for hundreds of years and in the ocean for even longer," said Jarraud. "Past, present and future emissions will have a [growing] impact" on the world's environment. (5)

A Plan for Change

WMO's report comes at an important moment for climate scientists and world leaders. A recent New York *Times* report revealed that China, the world's [leading](#) source of emissions, had burned 17% more coal in recent years than it had

previously admitted to. Chinese President Xi Jinping, however, promised that by 2030, his country would cut CO2 emissions by more than half. China has also spent \$83.3 billion on renewable energy sources, such as wind and solar power. (6)



AFP/GETTY IMAGES

Vehicles **navigate** through smog-covered streets in Beijing, China, on June 23, 2015. Officials in that country are working to reduce its greenhouse gas emissions. (7)

China's plans are part of a global effort **to address** climate change. More than 100 world leaders will meet in Paris, France, from November 30 to December 11, as part of the United Nations World Climate Summit. "The purpose of these three days is to find the road of compromise on as many issues as possible," said Laurent Fabius, France's Foreign Minister. (8)

Organizers also expect more than 40,000 people to attend the conference, including people who work to protect human and environmental rights. Climate scientists say that it is **imperative** to take action immediately. "Every year we report a new record in greenhouse gas concentrations. Every year we say that time is running out." said Jarraud. "We have to act now to **slash** greenhouse gas emissions if we are to have a chance to keep the increase in temperatures to **manageable** levels." (9)

Activities:

- A) **Vocabulary** – Do you know or can you guess the meaning of the words in blue? If not, look them up in a dictionary.
- B) Where do Greenhouse gases come from? (2)
- C) What did the New York Times report reveal about China?
(6)
- D) What is happening in Paris from 30th November to 11th December?

Discussion/ thinking question:

What can ordinary people us do to fight Climate change?