

[Home](#) » [See the Impacts](#) » [The Signs of Climate Change](#) » Higher Temperatures

Higher Temperatures



Greenhouse gases are trapping more heat in the Earth's atmosphere, which is causing average temperatures to rise all over the world.


What's happening now?

Temperatures have risen during the last 30 years, and 2001 to 2010 was the warmest decade ever recorded. As the Earth warms up, heat waves are becoming more common in some places, including the United States. Heat waves happen when a region experiences very high temperatures for several days and nights.

What will happen in the future?

The choices we make now and in the next few decades will determine how much the planet's temperature will rise. While we are not exactly sure how fast or how much the Earth's average temperature will rise, we know that:

- If people keep adding greenhouse gases into the atmosphere at the current rate, the average temperature around the world could increase by about 4 to 12°F by the year 2100.
- If we make big changes, like using more renewable resources instead of fossil fuels, the increase will be less—about 2 to 5°F.

 This map uses color-coding to show how much the temperature has changed in different parts of the United States since 1901.

In most parts of the United States, the average air temperature has increased since the early 20th century.
Source: [EPA's Climate Change Indicators \(2016\)](#).

Why does it matter?

Higher temperatures mean that heat waves are likely to happen more often and last longer, too. Heat waves can be dangerous, causing illnesses such as heat cramps and heat stroke, or even death.

Warmer temperatures can also lead to a chain reaction of other changes around the world. That's because increasing air temperature also affects the oceans, weather patterns, snow and ice, and plants and animals. The warmer it gets, the more severe the impacts on people and the environment will be.

Check out the major effects that higher temperatures have on people and the environment:

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