

CLIMATE CHANGE

Our decisions today shape the world's future for decades and centuries, benefiting the environment, health, equity, and our quality of life.

What is Climate Change?

Climate change refers to the long-term alterations in our weather patterns, like temperature, rainfall, and wind direction. These changes unfold over years, decades, or even centuries. They can lead to outcomes like increasing temperatures, shifts in rainfall patterns, and alterations in wind directions. Some of these shifts occur naturally, like how seasons change, but human activities, like burning fossil fuels for energy, release gases into the air that speed up these changes. By understanding and addressing climate change, we can work toward a more stable and sustainable future for our planet. ([EPA](#))



Climate



It's the average weather over a longer time, like years or even decades. It is what you usually expect in a place, like a hot summer. It is a usual pattern. ([NASA](#))

Weather



It's how the atmosphere acts in the short term, like what happens today or this week. It's about things like temperature, rain, clouds, and wind. It is what you experience. ([NASA](#))

Describing the climate as warm for this week/month would be **incorrect**. Instead, you should refer to the weather, which has been warm this week/month.

Principal Drivers



Climate change can happen naturally, like when the sun's activity or volcanic eruptions cause shifts in the Earth's climate. However, since the 1800s, people have become the main reason for climate change. We're doing this by burning things like coal, oil, and gas. Also, activities like transportation, energy use, industry, deforestation, and agriculture release gases like carbon dioxide and methane. These gases act like a blanket, trapping extra heat and making the Earth warmer than usual. ([UN](#))

What you can do

You can reduce climate change effects by making choices that cut greenhouse gas emissions.

- [Follow our sheet fact on how you can help](#)
- [Explore EPA recommendations on what you can do](#)

