

Climate is the long-term pattern of weather in a particular area. Changes in greenhouse gases, like carbon dioxide, water vapor, and other gases, in the atmosphere also impact climate change. Trees absorb carbon dioxide, so cutting down forests for timber or development contributes to the greenhouse effect. Some human activities release greenhouse gases—burning fossil fuels for transportation and electricity, or using agricultural technology that increases meat production, for instance. However, adding too many of these gases to the atmosphere can intensify the greenhouse effect and slowly make the Earth warmer. As climates change, organisms that live in the area must adapt, relocate, or risk going extinct. The greenhouse effect happens when these gases in the atmosphere absorb some of the sun's heat as it is radiated back from the surface of Earth. For periods of 30 years or more, however, distinct weather patterns occur. A desert might experience a rainy week, but over the long term, the region receives very little rainfall. Greenhouse gases trap the sun's heat in Earth's atmosphere, causing temperatures on the planet surface to rise. So do factories that emit pollutants into the atmosphere. It has a dry climate. This keeps Earth warm.