The Greenhouse Effect

ENVIRONMENTAL LAW INSTITUTE



Fast Facts Series

What is the greenhouse effect?



A "blanket" that warms our planet

Earth's atmosphere naturally contains small concentrations of greenhouse gases. These gases prevent heat supplied by the sun from escaping to the upper atmosphere, warming the planet's surface. This is known as **the greenhouse effect**.

What drives warming?

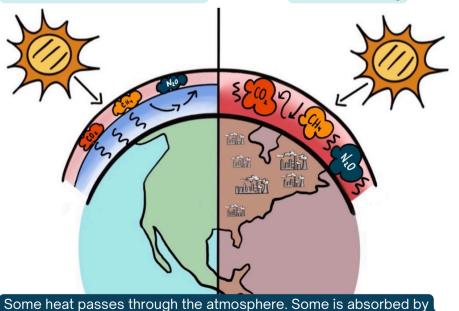


Human activity exacerbates warming

Human activity has increased the concentration of greenhouse gases in the atmosphere, resulting in an increased greenhouse effect and warming of the planet.

Natural Greenhouse Effect

Human Activity



greenhouse gases and re-emitted in all directions. The effect of this is

to warm the planet's surface and lower atmosphere.

Common greenhouse gases

Carbon Dioxide

Widely acknowledged as the most important greenhouse gas. It is produced naturally and by combusting coal, oil, and natural gas, among other human activities.



Methane

Naturally occurs in wetlands and termite mounds. It is produced from human activities such as coal mining, natural gas production, waste in landfills, livestock, and agriculture.



Nitrous Oxide

Emitted during combustion of solid waste and fossil fuels as well as other agricultural and industrial activities.



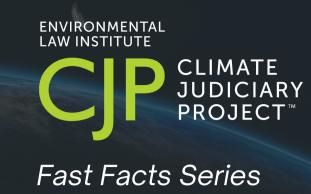
SO Why should judges care



As cases involving climate science increase, it is important that judges have an understanding of what drives climate change.



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Sources

Alexa Jay et. al., *Chapter 1: Overview*, Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment (2018), https://nca2018.globalchange.gov/chapter/1/.

Veronika Eyring et al., Chapter 3: Human Influence on the Climate System, Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (2021), https://www.ipcc.ch/report/ar6/wg1/chapter/chapter-3/.