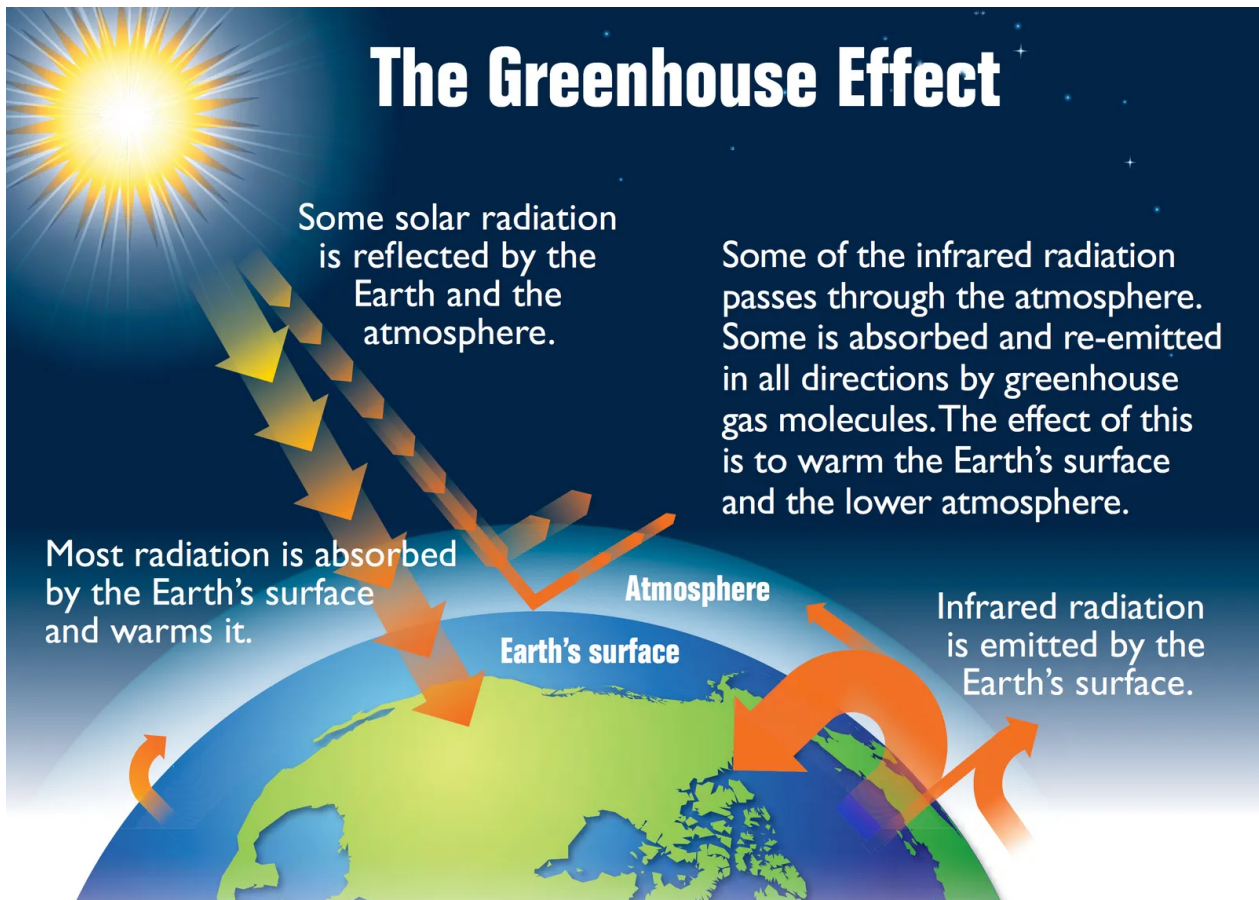


Greenhouse effect



Drivhuseffekten: Solens stråling varmer jordoverfladen, og drivhusgasserne i atmosfæren holder på en del af den varme, Jorden stråler ud igen. Diagram fra det amerikanske miljøagentur EPA.

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Greenhouse gases in the **atmosphere** that prevent heat from escaping into space.

The greenhouse effect captures heat in the **atmosphere**, but allows incoming **sunlight** to pass. When the sunlight reaches Earth's surface some of it is **absorbed** and converted to heat.

This heat then travels outward again, but is stopped by the greenhouse effect and captured in the atmosphere. Because the heat cannot escape back into space the atmosphere and Earth's surface both become warmer than they would have been without the insulating greenhouse effect. Changes in the insulating effect will lead to **climate change**.

The name greenhouse effect derives from the process described above. A greenhouse works in a similar manner by capturing heat from the sunlight inside the house. The greenhouse effect instead captures heat inside the atmosphere.

The main theory about the current [global warming](#) is that an increase in the greenhouse effect due to the emission of greenhouse gases caused by human activity is leading to higher temperatures.

The greenhouse effect is very important for [climate](#) and weather. Without the greenhouse effect, the average [temperature](#) at Earth's surface would be 33°C colder than now. Life as we know it would be impossible.

The greenhouse effect is caused by [greenhouse gases](#). High clouds also contribute to the greenhouse effect.

The most important greenhouse gas for [climate is water vapor](#), but the gas most responsible for [current climate change](#) is [carbon dioxide](#), CO₂.

This is because human activity, especially since the [industrial revolution](#), has resulted in a marked CO₂ increase in the atmosphere. Human activity has also increased the concentration of another potent greenhouse gas, [methane](#), CH₄.

Different greenhouse gases can be compared by their [global warming potential](#), where CO₂ is used as the standard. Other gases are then expressed in [carbon dioxide equivalents](#).

The part of the greenhouse effect caused by human activity is called the [anthropogenic](#) greenhouse effect. It is also sometimes referred to as the *enhanced* greenhouse effect.

Most of the man made increase in greenhouse effect is caused by the burning of [fossil fuels](#) and the resulting emission of greenhouse gases. This is sometimes referred to as the Callendar effect.

Sådan henviser du til opslaget

Klimaleksikon: "Greenhouse effect". climate-encyclopedia.com/greenhouse-effect, hentet 13. oktober 2026.

Klimaleksikon er gratis og uden login.