

THE GREENHOUSE EFFECT

Earth's atmosphere contains greenhouse gases, such as carbon dioxide and methane, that trap heat and warm Earth's surface.

The Sun mainly emits ultraviolet radiation. While some of the solar radiation gets reflected back into space, most gets trapped and absorbed by Earth's atmosphere to heat the surface.

The Earth mainly emits infrared radiation. This shortwave radiation cannot penetrate the atmosphere's greenhouse gas molecules, aerosols, and clouds, so it helps keep Earth warm.

Infrared Radiation

Ultraviolet Radiation

Earth's atmosphere

