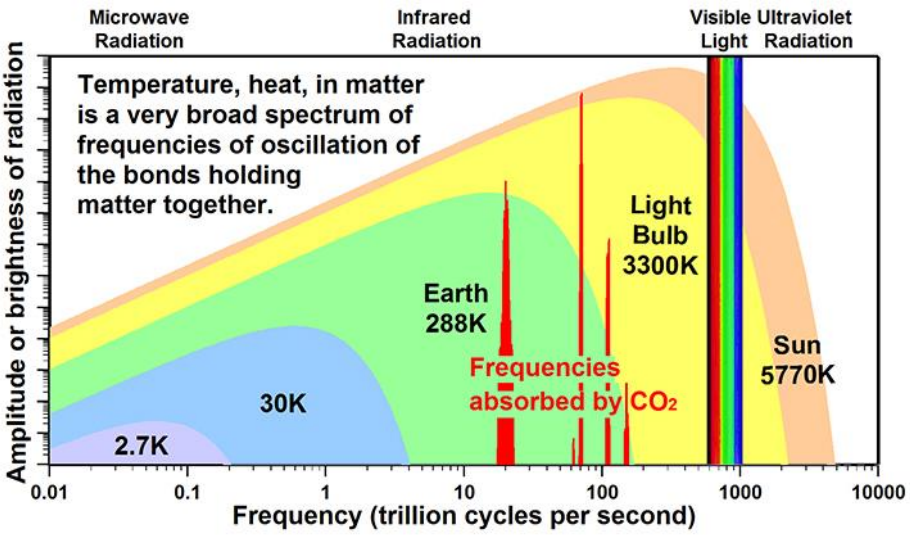
How much heat do greenhouse gases absorb?
We need to get the science right.

Dear [first name],

Finally world leaders agree that climate change is a serious problem and that we must reduce greenhouse gases now. As they meet to sign the Paris Accord on April 22, however, very serious cracks are opening in the foundation of greenhouse warming theory. It is very important that we resolve these issues right now. What if we spend trillions of dollars to reduce greenhouse-gas emissions and have no effect on climate? What happens to the reputation of science then?

The problem involves a fundamental shakeup in physics that needs to be resolved soon. The problem stems from mistaken assumptions made 150 years ago concerning how we calculate radiant energy in air and space. Atmospheric chemists, today, know that radiant energy is equal to frequency times the Planck constant—the energy that causes ionization and dissociation, forming and heating all atmospheric layers above the tropopause. This means that ultraviolet-B radiation observed to reach Earth when ozone is depleted is 48 times more energetic, 48 times "hotter" that infrared radiation absorbed most strongly by CO_2.

Second, this figure, illustrating Planck's law, shows that CO_2 absorbs less than 10% of the frequencies (vertical red bars), less than 10% of the heat radiated by Earth.



Third, CO_2 molecules only make up 0.04% of air. Very few molecules absorb very small amounts of energy that is 48 times less energetic than ultraviolet-B solar radiation which is completely absorbed by the ocean and by ground-level ozone pollution. CO_2 does not appear to absorb enough heat to have much effect on global warming.

Ozone depletion, on the other hand, explains observed warming recently and throughout Earth history clearly, directly and completely.

Please go to ClimatePlea.com where a 13-minute video explains the issue and the need to act promptly. There also are links to scientific talks, papers, and websites providing detail.

As you well know, science is never settled. We climate scientists are finally having a major effect on public policy. We owe it to society to be sure that we have the science right.

Sincerely,

Peter

Dr. Peter L. Ward (bio)
U.S. Geological Survey retired
P.O. Box 4875
Jackson, WY 83001
info@WhyClimateChanges.com
WhyClimateChanges.com
ScienceIsNeverSettled.com