

The Greenhouse Effect

- There is a natural greenhouse effect which keeps the Earth warm enough (average temperature about 60°F) to be habitable
 - Greenhouse gases like carbon dioxide, methane, and nitrous oxide and water vapor trap heat and warm the earth's surface
- The basic principles of the greenhouse effect are well understood
- For a given concentration of greenhouse gases, the resulting amount of radiative forcing (or heat trapping of energy) can be predicted with precision
- Exactly how the Earth's climate will respond to enhanced greenhouse gases will also depend on complex interactions between the atmosphere, oceans, land, ice, and biosphere