

## **Global Climate Change**

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The conceptual basis for human-induced global warming is straight forward -- increases in greenhouse gases (notably carbon dioxide) in the atmosphere leads to rising surface temperature through an adjustment of the radiative balance of the planet. The complex interactions and feedback mechanisms of the complete climate system along with its high degree of natural variability, however, make it very difficult to isolate specific cause and effect mechanisms or to project future changes. This talk will cover some of the basic concepts of the climate system as they relate to climate change, the current state of the science, and the impacts of changes in the climate. The role of science and science organizations in policy issues relating to climate change will also be addressed