

CLIMATE CHANGE

State of Knowledge





The Office of Science and Technology Policy (OSTP) was established by the National Science and Technology Policy, Organization, and Priorities Act of 1976. OSTP is responsible for advising the President on all questions in which science and technology are important elements, including climate change.

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October 1997

Background

During the 1980s, scientific evidence about global climate change and its consequences led to growing concern among scientists, policy makers, and the public. In 1988, the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) jointly established the Intergovernmental Panel on Climate Change (IPCC). Through the IPCC process, scientists representing more than 150 countries have assessed the available information on climate change and its environmental and economic effects and have provided the scientific understanding needed to help formulate appropriate responses. A series of IPCC reports, incorporating extensive peer review and a commitment to scientific excellence, have provided the most authoritative and comprehensive information available on the science of climate change. In 1996, the IPCC published its Second Assessment Report, which summarizes the most recent information on climate change science and the vulnerability of natural and socioeconomic systems.

IPCC Website: <http://www.ipcc.ch/>

In 1990, the United Nations (UN) General Assembly established the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (FCCC). The FCCC was adopted in 1992, and over 160 signatories have now become parties to the agreement. The agreement was signed by the President of the U.S. and ratified by the U.S. Senate in 1992. The ultimate aim of the FCCC is to stabilize greenhouse gas concentrations "at a level that would prevent dangerous anthropogenic interference with the climate system." This stabilization should be achieved within a time frame that (1) allows ecosystems to adapt naturally to climate change, (2) ensures that food production is not threatened, and (3) enables sustainable economic development to proceed.

Framework Convention Website:
<http://www.unep.ch/iucc.html>

In the United States, climate change research is overseen by the U.S. Global Change Research Program (USGCRP), which was established in 1989. Since its inception, the USGCRP has strengthened research on key scientific issues and has fostered improved understanding of Earth processes. New directions for the USGCRP include identifying and analyzing regional vulnerabilities to climate variability and climate change. The results of the research it supports have played an important role in the work of the IPCC and other national and international bodies.

GCRP Website: <http://www.usgcrp.gov/>