



## Climate Change Resources: Internet Links

*Listing of this information is intended as a resource and does not imply endorsement by EPA.*

**T**he websites listed below directly or indirectly relate to the issue of global warming. Although the list is not comprehensive, it does include a wide range of existing links such as sites for state and federal agencies, universities and other educational institutions, nongovernmental organizations (e.g., environmental groups and trade associations), and international bodies of government scientists and policymakers. Please be advised that although these site addresses were current at the time of printing, addresses and content may change over time.

Special thanks to U.S. Environmental Protection Agency Region 1 for use of the "Website Guide to Global Climate Change," revised December 30, 1997. This resource is available at <http://www.epa.gov/region01/steward/cchange/guide.html>.

### Federal Agencies

#### White House Initiative on Global Climate Change

Website: <http://www.whitehouse.gov/Initiatives/Climate/main.html>

##### Summary

The flagship website of U.S. global climate change policy, this site presents the Administration's analysis as well as actions aimed at national and international interventions. Many aspects of international negotiations, national policy, science, scientific uncertainty, impacts, and mitigative controls are introduced.

#### White House Office of Science and Technology Policy

Website: [http://www.whitehouse.gov/WH/EOP/OSTP/html/OSTP\\_Home.html](http://www.whitehouse.gov/WH/EOP/OSTP/html/OSTP_Home.html)

##### Summary

The Office of Science and Technology Policy (OSTP) was created to provide the president with timely policy advice and to coordinate science and technology investment.

#### United States Global Change Research Program

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

##### Summary

The U.S. Global Change Research Program (USGCRP), working with research institutions in the United States and internationally, provides the foundation for increasing the skill of predictions of seasonal-to-interannual climate fluctuations (which can bring excessively wet and dry periods) and long-term climate



change. The USGCRP also sponsors research to understand the vulnerabilities to changes in important environmental factors, including changes in climate, ultraviolet radiation at the earth's surface, and land cover.

## USGCRP Global Change Data and Information System

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

### Summary

This site is a collection of distributed information systems operated by government agencies involved in global change research. GCDIS includes multidisciplinary data from atmospheric science, ecology, oceanography, as well as economics and sociology. GCDIS is a cooperative activity of agencies participating in the U.S. Global Change Research Program.

## USGCRP United States National Assessment: The Potential Consequences of Climate Variability and Change

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

### Summary

The U.S. National Assessment of the Potential Consequences of Climate Variability and Change for the Nation will provide an understanding of the consequences of climate change for the nation and will examine the possible coping mechanisms that exist to adapt to climate change. This assessment will include regional activities, sectoral activities, and a broad synthesis. It will be conducted as a public-private partnership and will emphasize a process driven by the needs of the stakeholders throughout the country who are best positioned to identify the priority information needs, and the most rewarding ways of responding. The Synthesis Report, as well as the regional and sectoral volumes, will be published in January 2000. However, the National Assessment has been conceived as an ongoing process to continue beyond the publication of the first reports, eventually also dealing with other global change-related issues.

## EPA Global Warming Website

Website: <http://www.epa.gov/globalwarming>

### Summary

This site provides detailed information about global warming concepts and developments, including Greenwire, the U.S. Greenhouse Gas Inventory, and extensive links to other related websites.

## EPA Emission Inventory Improvement Program: Greenhouse Gas Committee

Website: [http://www.epa.gov/ttn/chief/elip/elip\\_ghg.htm](http://www.epa.gov/ttn/chief/elip/elip_ghg.htm)

### Summary

The Greenhouse Gas (GHG) Committee of the Emission Inventory Improvement Program (EIIP) is sponsored by EPA, the State and Territorial Air Pollution Program Administrators (STAPPA), and the Association of Local Air Pollution Control Officials (ALAPCO). The committee is dedicated to improving the quality, reliability, and verifi-

ability of inventories of sources and sinks of greenhouse gases. The committee released a report that helps states quantify their greenhouse gas emissions.

## EPA Office of Research and Development: Atmospheric Protection Branch

Website: <http://www.epa.gov/crb/apb/index.htm>

### Summary

EPA initiated a program in global atmospheric pollutants during the mid-1980s. The climate-related program has conducted emissions evaluations primarily on methane, developed software for data storage and processing, researched improvements in biomass utilization for niche applications, and performed bench-scale evaluations of a replacement transportation fuel.

## EPA Program on Economy and Environment

Website: <http://www.epa.gov/oppe/eaed/eedhmpg.htm>

### Summary

This program concentrates on research and analyses on environmental economics with emphasis on benefit-cost analysis of environmental pollution controls, the use of economic incentives for pollution control, the environmental pollution control industry, and the relationships between economic growth and pollution control.

## EPA Regional Climate Sites

Websites:

- Region 1—<http://www.epa.gov/region01/steward/cchange/index.html>
- Region 3—<http://www.epa.gov/reg3artd/newnet/gwmain.htm>
- Region 5—<http://epainotes1.rtpnc.epa.gov:7777/r5/air/r5ard.nsf/9098e0c5dd824624862565b60059d070?OpenView&Count=50>
- Region 7—<http://www.epa.gov/region7/specinit/p2/volprog/volprog.htm>
- Region 8—<http://www.epa.gov/region08/p2/energy/climate.html>

## EPA Reinvention for Innovative Technologies

Website: <http://www.wpi.org/epa/refit/who.html>

### Summary

The goal of EPA's policy Reinvention for Innovative Technologies (ReFIT) program is to strengthen incentives for the development and use of promising new technologies. ReFIT was established under the Environmental Technology Initiative (ETI), an EPA-led interagency program to improve public health and environmental protection by removing barriers to technology innovation.

## EPA Voluntary Federal Programs to Reduce Greenhouse Gas Emissions

Website: <http://www.epa.gov/globalwarming/actions/national/ccap/plan.html>

### Summary

The Climate Change Action Plan (CCAP) relies primarily on innovative partnerships with the private sector,

states, and localities to address the challenge of global warming while strengthening the economy. Composed of more than 50 federal voluntary programs, CCAP is a comprehensive plan that targets all major greenhouse gases and all sectors of the economy.

## EPA Climate Change-Methane and Other Greenhouse Gases

Website: <http://www.epa.gov/ghginfo/>

### Summary

This site addresses methane's contribution to global warming; trends in emissions of methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fully fluorinated compounds (PFCs, HFCs, and SF<sub>6</sub>); and economic analyses related to stabilization of these greenhouse gases. The site also provides resources for locating more detailed information as well as links to related sites.

## EPA Climate Wise

Website: <http://www.epa.gov/climatewise/>

### Summary

Companies participating in Climate Wise volunteer to reduce their greenhouse gas emissions by implementing energy efficiency and pollution prevention measures. Climate Wise provides technical assistance, workshops, seminars, and case studies to companies to help them reach their reduction goals.

## EPA ENERGY STAR® and Green Lights Programs

Website: <http://www.epa.gov/energystar.html>

### Summary

EPA has teamed with the private sector in developing cutting-edge, voluntary partnerships. By encouraging the production and use of energy-efficient equipment, energy usage and air pollution can be drastically reduced.

## EPA State and Local Climate Change Outreach Program

Website: <http://www.epa.gov/globalwarming/actions/national/ccap/state/index.html>

### Summary

This is a capacity-building program focusing on state and local government decision-makers. The program provides technical and financial assistance to state and local officials and the organizations that support state and local functions, in order to:

- Increase the level of understanding of the economic and environmental impacts of climate policies at the state, regional, national, and international levels.
- Assess the risks of climate change.
- Understand state and local contributions to greenhouse gas emissions.
- Evaluate and assess options to address and reduce emissions.
- Identify the co-benefits of mitigation policies to increase adoption of innovative policies and programs.
- Implement cost-effective policies and measures that result in greenhouse gas reductions.

- Share results and educate stakeholders to increase transferability of technologies and policies.

## EPA Transportation Partners Program

Website: <http://www.epa.gov/tp>

### Summary

The Transportation Partners Program is now discontinued. The website gives options for related transportation links.

## United States Department of Energy

Website: <http://www.doe.gov>

### Summary

The Department of Energy has many web pages relating to climate change.

## DOE Alternative Fuels Data Center

Website: <http://www.afdc.nrel.gov/>

### Summary

The Alternative Fuels Data Center (AFDC) is operated by the National Renewable Energy Laboratory (NREL) with funding and direction from the Office of Alternative Fuels within the Office of Transportation Technologies at the U.S. Department of Energy (DOE). The AFDC collects operating information from vehicles (through programs sponsored by the Alternative Motor Fuels Act) running on alternative fuels, analyzes those data, and makes them available to the public.

## DOE Carbon Dioxide Information Analysis Center (CDIAC)

Website: <http://cdiac.esd.ornl.gov/cdiac>

### Summary

An archive of data sets and publications, CDIAC's scope includes information on concentrations of carbon dioxide and other radiatively active gases in the atmosphere; the role of the terrestrial biosphere and the oceans in the biogeochemical cycles of greenhouse gases; emissions of carbon dioxide to the atmosphere; long-term climate trends; the effects of elevated carbon dioxide on vegetation; and the vulnerability of coastal areas to rising sea levels.

## DOE Energy Efficiency and Renewable Energy Network

Website: <http://www.eren.doe.gov/>

### Summary

The goal of the Energy Efficiency and Renewable Energy Network is to develop cost-effective energy efficiency and renewable energy technologies that protect the environment and support the nation's economic competitiveness.

## DOE Energy Information Administration

Website: <http://www.eia.doe.gov/environment.html>

### Summary

This is the greenhouse gases section of the Energy Information Administration's (EIA) web server. This page offers links to other greenhouse gas and climate change sites of potential interest.

## DOE National Industrial Competitiveness through Energy, Environment and Economics

Website: <http://www.oit.doe.gov/Access/nice3/>

### Summary

DOE's cost-sharing program to promote energy efficiency, clean production, and economic competitiveness in industry is known as NICE<sup>3</sup>. It provides funding to state/industry partnerships for projects that develop and demonstrate advances in energy efficiency and clean production technologies.

## DOE Voluntary Reporting of Greenhouse Gases Program

Website: <http://www.eia.doe.gov/oiaf/1605/frntvrgg.html?59,84>

### Summary

The Voluntary Reporting of Greenhouse Gases Program of the Energy Information Administration (EIA) was created under Section 1605(b) of the Energy Policy Act of 1992 (EPACT). This program affords an opportunity for any organization or individual to establish a public record of emissions, reductions, or sequestration achievements in a national database.

## U.S. National Oceanic and Atmospheric Administration

Website: <http://www.noaa.gov/>

### Summary

NOAA's mission is to describe and predict changes in the Earth's environment and to conserve and manage wisely the nation's coastal and marine resources. From this page, you can take a tour of NOAA programs and activities, acquire data collected from NOAA projects, locate NOAA staff, and learn about opportunities within NOAA.

## NOAA Climate Monitoring and Diagnostics Laboratory

Website: <http://www.cmdl.noaa.gov>

### Summary

This NOAA lab conducts research related to atmospheric constituents capable of changing the Earth's climate through atmospheric radiation including, but not limited to, greenhouse gases and aerosols and those that deplete the ozone layer.

## NOAA Climate Prediction Center

Website: <http://www.cpc.ncep.noaa.gov>

### Summary

The mission of the NOAA Climate Prediction Center is to maintain a continuous watch on short-term climate fluctuations and to diagnose and predict them. These efforts are designed to assist agencies both inside and outside the federal government in coping with such climate-related problems as food supply, energy allocation, and water resources.

## NOAA Global Warming Update

Website: <http://www.ncdc.noaa.gov/ol/climate/globalwarming.html>

### Summary

This page from NOAA is based on a brief synopsis of the 1995 Intergovernmental Panel on Climate Change (IPCC) and subsequent material. It was prepared by Rob Quayle, Tom Peterson, and Tom Karl of the National Climatic Data Center (NCDC).

## NOAA National Climatic Data Center

Website: <http://www.ncdc.noaa.gov/>

### Summary

The National Climatic Data Center (NCDC) is the world's largest active archive of weather data. NCDC produces numerous climate publications and responds to data requests from all over the world. This site offers access to distributed NOAA data and information from NOAA Data Centers and Centers of Data, including NCDC.

## NOAA National Weather Service

Website: <http://www.nws.noaa.gov>

### Summary

The National Weather Service provides weather and flood warnings, public forecasts and advisories for all of the United States, its territories, adjacent waters and ocean areas, primarily for the protection of life and property.

## NOAA Office of Global Programs

Website: <http://www.ogp.noaa.gov>

### Summary

The Office of Global Programs (OGP) leads the NOAA Climate and Global Change (C&GC) Program. NOAA has the primary responsibility within the federal government to provide climate forecasts and products to the nation. OGP assists in this capacity by sponsoring focused scientific research, within approximately 11 research elements, aimed at understanding climate variability and its predictability. Through studies in these areas, researchers coordinate activities that jointly contribute to improved predictions and assessments of climate variability over a continuum of time scales from season to season, year to year, and over the course of a decade and beyond.

## NOAA Office of Oceanic and Atmospheric Research

Website: <http://www.oar.noaa.gov/>

### Summary

The Office of Oceanic and Atmospheric Research, the primary research arm of NOAA, conducts and directs research in atmospheric, coastal, marine, and space sciences through its own laboratories and programs, and through networks of university-based programs. The principal divisions of OAR are the Environmental Research Laboratories, National Sea Grant College Program, National Undersea Research Program, and the Office of Global Programs.

## NOAA Reporting on Climate Change: Understanding the Science

Website: <http://www.nsc.org/ehc/guidebks/climtoc.htm>

### Summary

*Reporting on Climate Change, Understanding the Science* is a publication of the Environmental Health Center, National Safety Council, and the National Oceanic and Atmospheric Administration. November 1994.

## United States National Aeronautical and Space Administration

Website: <http://www.nasa.gov/>

### Summary

NASA is deeply committed to spreading the unique knowledge that flows from its aeronautics and space research.

## NASA Global Change Data Center

Website: <http://www-tsdis.gsfc.nasa.gov/gcdc/gcdc.html>

### Summary

The mission of the Global Change Data Center (GCDC) is to develop and operate data systems, generate science products, and provide archival and distributional services for earth science data in support of the U.S. Global Change Program and NASA's Mission to Planet Earth.

## NASA Global Change Master Directory

Website: <http://gcmd.gsfc.nasa.gov>

### Summary

NASA's Global Change Master Directory (GCMD) is a comprehensive directory of information about earth science data, including broad coverage of the oceans, atmosphere, hydrosphere, solid earth, biosphere, and human dimensions of global change.

## U.S. Department of State: Bureau of Oceans and International Environmental and Scientific Affairs

Website: <http://www.state.gov/www/global/oes/index.html>

### Summary

The Bureau of Oceans and International Environmental and Scientific Affairs (OES) is the Department of State's focal point for foreign policy formulation and implementation in global environment, science, and technology issues.

## Greenhouse Gas Technology Verification Center

Website: <http://www.sri-rtp.com/> (requires "virtual machine" download)

### Summary

The Greenhouse Gas Technology Verification Center is an independent testing organization with a mission to provide a credible third-party verification capability to vendors, buyers, and other stakeholders that need reliable greenhouse gas technology performance data.

## Federal Agency-University Partnerships

### Center for International Earth Science Information Network (CIESIN)

Website: <http://www.ciesin.org>

#### Summary

CIESIN specializes in global and regional network development, science data management, decision support, and training, education, and consultation services. It is part of the Columbia Earth Institute at Columbia University in Palisades, New York.

### CIESIN Global Warming and Mortality

Website: <http://www.ciesin.org/TG/HH/morthmpg.html>

#### Summary

CIESIN Thematic Guides (provisional release) describes potential increases in mortality due to global warming.

### United States Global Change Research Information Office (US GCRIO)

Website: <http://www.gcrio.org>

#### Summary

The U.S. Global Change Research Information Office (GCRIO) provides access to data and information on global change research, adaptation/mitigation strategies and technologies, and global change-related educational resources on behalf of the USGCRP. GCRIO is implemented by CIESIN.

### Global Climate Change Information Program

Website: <http://www.doc.mmu.ac.uk/aric/gcciphm.html>

#### Summary

The Global Climate Change Information Programme (GCCIP) was established in October 1991, with the express purpose of providing the necessary information link between scientists (both natural and social), politicians, economists, and the public. GCCIP was formed as a part of the Atmospheric Research and Information Centre (ARIC) based at the Manchester Metropolitan University. The major aim of the programme is to provide up-to-date information, in a number of user friendly options, on climate change to the public, students, teachers, lecturers, researchers, industry, and decisionmakers.

### Institute for the Study of Planet Earth at the University of Arizona (ISPE)

Website: <http://www.ispe.arizona.edu/>

#### Summary

Researchers affiliated with ISPE are active participants in the U.S. Global Change Research Program, a coordinated effort to address the nature and implications of global environmental change.

### National Center for Atmospheric Research (NCAR)

Website: <http://www.ncar.ucar.edu/>

#### Summary

NCAR's mission is to plan, organize, and conduct atmospheric and related research programs in collaboration with universities to provide state-of-the-art research tools

and facilities to the atmospheric sciences community, to support and enhance university atmospheric research education, and to facilitate the transfer of technology to the public and private sectors.

## University Corporation for Atmospheric Research

Website: <http://www.ucar.edu>

### Summary

UCAR's mission is to support, enhance, and extend the capabilities of the university community, nationally and internationally, to understand the behavior of the atmosphere and related systems and the global environment, and to foster the transfer of knowledge and technology for the betterment of life on earth.

## University Corporation for Atmospheric Research: Environmental and Societal Impacts Group

Website: <http://www.dir.ucar.edu/esig/>

### Summary

ESIG is a multidisciplinary research group within the National Center for Atmospheric Research (NCAR) focusing on the impacts of society on the environment and of the environment on society. Our objective is to provide insights into how societies might better understand and cope with the interactions between human activities and changes in environmental, particularly atmospheric, processes.

## Educational Institutions

### Center for Climatic Research, University of Delaware

Website: <http://www.udel.edu/SynClim/scl.html>

### Summary

A university-wide Center for Climatic Research was established in the Department of Geography in 1978. The purpose of the center is to bring together scientists from the university community who are working in either basic or applied climatology to share their research ideas and to undertake interdisciplinary studies. Current research includes studies of global climate change, the role of the land surface in climate change, impacts of climate change on human health and water resources, glacier energy and mass budgets, hydroclimatology of South America, and relationships between snow cover and weather patterns.

### Center for Integrated Study of the Human Dimensions of Global Change

Website: <http://hdgc.epp.cmu.edu/>

### Summary

Includes information on the following topics: Natural Systems; Managed Systems; Decisionmaking; and Assessment. Also contains the "Degrees of Change" newsletter, and current projects and publications.

## Pace Energy Project

Website: <http://www.law.pace.edu/env/energy>

### Summary

The Pace Energy Project provides information with a legal bias concerning the electric power industry, the insurance industry, and alternative energy projects. The file "Global Warming Central" provides access to information on both sides of the global warming debate, experts, and links to more information.

## Environmental Education

### Four H Council: Sweating Over Climate Change

Website: <http://www.fourhcouncil.edu/ycc/gpmc/climate/climate.html>

### Summary

A site where children can learn how energy, climate, land, people, and choice can affect the Earth.

### NASA K-12 Interactive Quest

Website: <http://quest.arc.nasa.gov/interactive>

### Summary

This site encourages interactions between students and working professionals at NASA. Students are encouraged to read files and to ask questions. Some specific media broadcasts are transcribed and provided with teacher guides for classroom use. One relevant topic is in a file called "Live from Antarctica 2" where ice core research is up for discussion. Much pictorial backup is provided.

### Eisenhower National Clearinghouse

Website: <http://enc.org>

### Summary

This is a science education site that introduces climate change topics for teachers. Grade-specific units are included with back-up ordering capability.

### Electric Library

Website: <http://www.elibrary.com>

### Summary

A general reference library of newspaper, magazine, report, book, picture, video, and other sources. It includes science information for direct on-line use. Searching for "global warming" and "greenhouse gas emissions" produces lists of documents telling the size of the source and the reading level required. Reading levels appear to be chiefly for grades 5-12.

### Exploratorium

Website: <http://www.exploratorium.edu>

### Summary

The Exploratorium, a San Francisco children's science museum, has an Internet presence called ExploraNet. Among its many files are ones with updated contents regarding global climate change, including "Science Learning Network," "Corvis," and "Science Information









