



U.S. DEPARTMENT of STATE

Fact Sheet

Bureau of Oceans and International Environmental and Scientific Affairs
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United States Record of Action to Address Climate Change Domestically

"My Administration is committed to a leadership role on the issues of climate change. We recognize our responsibility and we will meet it, at home, in our hemisphere, and in the world." – **President George W. Bush**

The United States government is pursuing a broad strategy to address climate change and reduce emissions of greenhouse gases, and has recently enhanced these efforts by providing significant new resources for both domestic and international climate programs. Current domestic activities and programs involve all of the major greenhouse gas-emitting sectors of our economy. The United States government estimates that its existing climate change programs reduced emissions by 66 million metric tons of carbon equivalent in 2000, approximately 2.7% of total emissions. The amount of CO₂ emitted per unit of GDP (the greenhouse gas "intensity" of our economy) declined by 15% from 1990 to 1999. President Bush has established a goal of further reducing the greenhouse gas intensity of the US economy by 18% in the coming decade, and has increased funding for climate change related programs by 17%, bringing total US government spending this year to \$4.5 billion, a commitment that is unmatched in the world. The United States leads the world in basic climate change research and has a long record of support for basic and applied research designed to discover and develop technologies to limit or mitigate greenhouse gas emissions.

The following section highlights several illustrative programs employed to decrease greenhouse gas emissions in major sectors of the United States economy.

Electricity: Federal programs promote greenhouse gas emissions reductions through the development of cleaner, more efficient technologies for electricity generation and transmission. For example, the Environmental Protection Agency (EPA)/Department of Energy (DOE) *Combined Heat and Power Challenge* program has the goal of doubling United States' combined heat and power capacity by 2010, by providing technical assistance and addressing regulatory issues where possible. Combining heat and power generation saves energy and reduces air pollution and greenhouse gas emissions.

The Federal government also supports renewable resources such as solar energy, wind power, geothermal energy, hydropower, bioenergy, and hydrogen. DOE supports the development of a wide range of solar and renewable energy technologies, seeking to improve reliability, expand applicability, and reduce costs. These activities have been very successful. The cost of producing photo-voltaic modules has been cut in half since 1991, and the cost of wind power has decreased 85% since 1980.

Transportation: *FreedomCAR* is a new public-private partnership launched by the Bush Administration in partnership with the nation's automobile manufacturers. It seeks to promote the development of hydrogen as a primary fuel for cars and trucks, with the goal of building a commercially viable zero-emissions hydrogen-powered vehicle. *FreedomCAR* focuses on technologies to enable mass production of affordable hydrogen-powered fuel cell vehicles and the hydrogen-supply infrastructure to support them.

Industry: The United States government is implementing many partnership programs with industry to reduce emissions of CO₂ and other greenhouse gases, to promote source reduction and recycling, and to increase the use of combined heat and power. As a result, industrial sector GHG emissions have been reduced by 5.8% since 1990. Current voluntary partnerships, directed at eliminating market barriers to the profitable collection and use of methane that otherwise would be released to the atmosphere, are expected to hold methane emissions below 1990 levels through 2010. Since the launch of EPA's *Voluntary Aluminum Industrial Partnership* in 1995, the program's membership has grown to include 22 of the nation's 23 aluminum smelters, representing 94% of the United States' production capacity. As of 2000, program partners cumulatively achieved a 45% reduction in perfluorocarbon (a high global warming potential gas) emissions from 1990 levels. In addition, EPA's new *Climate Leaders* program encourages companies to develop long-term comprehensive climate change strategies. Partners agree to set a corporation-wide greenhouse gas reduction goal and inventory their emissions to measure progress. *Climate Leaders*

currently has 30 partners from a wide variety of industrial sectors, of whom, seven already have announced greenhouse gas emissions reduction goals.

Commercial and Residential Buildings: Partnership programs promote energy efficiency in the nation's commercial, residential, and government buildings by offering technical assistance as well as the labeling of energy efficient products, new homes, and office buildings. As one example, the EPA/DOE *Energy Star* program collaborates with a wide range of building owners and users – retailers, real estate investors, small businesses, governments and schools – to improve their energy performance. Since the inception of the program, more than 750 million *Energy Star* products have been purchased, more than 57,000 *Energy Star* homes have been built and more than 10,000 commercial buildings have been benchmarked using *Energy Star's* national building performance energy rating system. Nationwide, *Energy Star* has saved more than 80 billion kilowatt hours of electricity and eliminated the need for over 10,000 megawatts of peak generating capacity – the amount of energy required to power more than 10 million homes.

Agriculture and Forestry: The Federal government is conducting research into methods to reduce emissions of methane and nitrous oxide from agriculture, and is implementing conservation programs that have the benefit of sequestering carbon in soils and forests. For example, the United States Department of Agriculture's *Conservation Reserve Program (CRP)* has taken over 36 million acres of environmentally sensitive cropland out of production. CRP provides long-term environmental benefits, including the offset of up to 12 million metric tons of carbon equivalent each year.

The Federal Government: The Federal government has taken steps to reduce greenhouse emissions from energy use in Federal buildings and in the Federal transportation fleet by:

1. Requiring all Federal agencies to cut greenhouse gas emissions from energy use in buildings to 30% below 1990 levels by 2010.
2. Directing Federal agencies in Washington, D.C. to offer to their employees up to \$100 per month in public transit and van-pool benefits.

Science and Technology Research and Development: The United States leads the world in climate change research and has spent over \$20 billion on climate and global change research since 1990. The United States' research and development agenda addresses major gaps in understanding (e.g., the carbon cycle and the role of black soot), and the development and deployment of advanced energy and sequestration technologies critical to long-term emissions reductions. The President's FY 2003 budget provides nearly \$1.8 billion for climate change science and \$1.3 billion to develop new climate-related technologies.

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