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**Scientists Call for 80 Percent Drop in U.S. Emissions by
2050 to Avoid Dangerous Warming**

By 2050, the United States must cut its emissions by at least 80 percent below those created in the year 2000 if the world is to avoid potentially dangerous impacts of human-induced climate change, according to a report released today by Texas Tech University, the Union of Concerned Scientists (UCS) and Stanford University.

To avoid the most severe effects of climate change, the world must stabilize the concentration of heat trapping gases in the atmosphere at no more than 450 parts per million, said Katharine Hayhoe, an associate professor of geosciences at Texas Tech University who performed the emissions-reduction calculations for the joint report.

This 450-parts-per-million limit aims to avoid a temperature increase exceeding 3.5 degrees Fahrenheit in a global average temperature above pre-industrial levels – a temperature-change benchmark which Hayhoe and other scientists believe could wreak increasing havoc on the environment as it is exceeded.

“The study assumes both developing and industrialized countries would have to converge to equitable per-capita emissions to stabilize the world’s climate,” she said. “However, even with other countries taking aggressive action, since the United States is responsible for nearly one-quarter of global emissions, it must act now to achieve the deep cuts in its energy consumption that will be required to meet this target.”

The cost of delaying U.S. emission reductions could be high, said Michael D. Mastrandrea, a research associate at the Woods Institute for the Environment at Stanford University.

“If we wait until 2020 to start emission reductions, we’ll have to cut twice as fast than if we start in 2010 to meet the same target,” Mastrandrea said.

While an 80 percent reduction sounds daunting now, Hayhoe said that the sooner we start, the greater our chances of successfully meeting that target.

“We’ve got 40 years to radically increase the efficiency of the way we use energy,” she said. “It’s also time to start considering more extensive ways to harness renewable energy sources through solar panel arrays and wind farms, for example. It’s worth it to put in the effort now to reduce our emissions. If we don’t, there will be a lot more work to do just to adapt to the impacts of climate change in the future.”

Stabilizing above this 450-parts-per-million level would likely lead to severe risks to both natural systems and human welfare, Hayhoe said.

“Sustained warming of this magnitude could, for example, result in the extinction of many species and increase the threat of extensive melting of the Greenland and West Antarctic ice sheets,” she said.

Policies under consideration in the United States vary in the timing and levels of emissions cuts they call for and many fail to achieve the minimum pollution cuts needed.

“This report makes clear that the United States must make meaningful cuts in global warming pollution, and soon, to reduce the risk of severe climate impacts,” said Alden Meyer, director of Strategy and Policy at the Union of Concerned Scientists. “President Bush should drop his opposition to mandatory emissions limits, and put forward a specific proposal to aggressively reduce U.S. emissions at the meeting of major emitting countries that he is hosting next week.”

They advised that Congress must also act to help the world avoid the worst consequences of global warming. Several pieces of legislation have been introduced that set mandatory reductions, but only two bills would keep U.S. emissions within the overall limits called for in the UCS study. One measure was introduced by Rep. Henry Waxman (D-Calif.), and the other by Sens. Bernie Sanders (I-Vt.) and Barbara Boxer (D-Calif.).

To read the report, go to: <http://www.ucsusa.org/emissionstarget.html>.

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