

Global Warming Is for Real

The US Must End its 'Can't Do' Attitude and Get to Work to End This Threat to Life on Earth

By Rep. Henry Waxman

EPA Administrator William Reilly testified last month that global warming is the most serious environmental problem that our nation faces. In fact, it may be the greatest single threat to life on this planet.

Global warming is caused by continuing global emissions of gases such as carbon dioxide (CO₂), methane, and nitrous oxide, which are building up in our planet's atmosphere at unprecedented levels.

Like the glass panes in a greenhouse, these gases allow the sun's warming rays to reach the earth, but they trap the radiating heat that the earth then gives off. Through the resulting "greenhouse effect," the buildup of these gases is expected to lead to a warmer earth.

Global climate change is generally perceived to be a matter of considerable scientific controversy, but most Americans would be surprised by just how much is known — and how much is accepted by a broad consensus of scientists.

To begin with, we know that the greenhouse effect is real. Earth itself would be more than 50 degrees Fahrenheit cooler were it not for the warming effect of greenhouse gases, such as CO₂. And, in our neighboring planet Venus, where surface temperatures of 850 degrees Fahrenheit are the result of high concentrations of greenhouse gases, we have a very clear example of what a runaway greenhouse effect can do.

We also know that concentrations of CO₂ have been steadily increasing in our atmosphere since the Industrial Revolution.

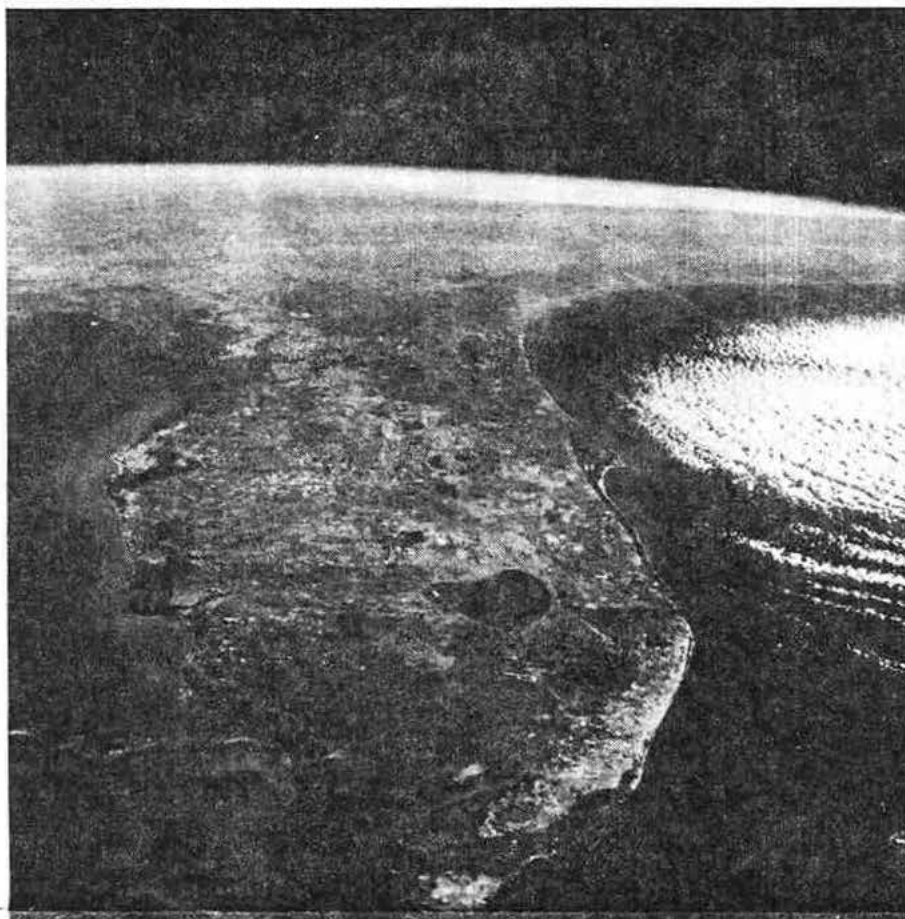
Continual increases in CO₂ levels have been recorded over the past three decades, which is as long as the key monitoring stations have been in operation, and scientists agree that global CO₂ concentrations have increased by 26 percent since the Industrial Revolution.

Most importantly, there is agreement that earth will warm as a result of the continuing release of greenhouse gases. The Intergovernmental Panel on Climate Change (IPCC), an international scientific body convened by the United Nations and supported by the US, recently concluded that warming of the planet as a result of greenhouse emissions is a certainty.

While scientists are not yet in complete agreement on how much the earth will warm, or how quickly the warming will occur, there is a general consensus that global average temperatures will increase by three to nine degrees Fahrenheit over the next 100 years.

Warming of this magnitude

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The state of Florida (here, nearly in its entirety) could be greatly affected by the climate changes that will come with global warming. If the level of the oceans rises, coastal communities could be flooded. Other calamities include drought and loss of drinking water.

Photo courtesy NASA

could have devastating consequences. It was a change of only nine degrees that made the difference between earth's last ice age and today's climate.

Moreover, natural climate shifts have always taken place over periods of tens of thousands of years, rather than decades. Our ecosystems are likely to have great difficulty surviving such a rapid change.

While we do not yet have scientific certainty, there are strong indications that greenhouse

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warming has already begun. According to the National Aeronautics and Space Administration (NASA) and the British Meteorological Office, last year's global average temperature was the highest ever recorded.

In fact, the six warmest years of the past 100 were all in the last decade.

However, there is so much natural variability in climate, that we cannot yet say unequivocally that all this warm weather evidences the beginning of the greenhouse earth. Some scientists, most notably Dr. James Hanson of the Goddard Space

Flight Institute, now think so.

The impacts of climate change are also still a matter of some uncertainty. But they can be expected to be quite broad and quite dramatic.

The range of identified concerns includes: drought; sea level rise with inundation of coastal areas; loss of drinking water supplies; disruption of agriculture; direct health problems, such as heat stroke and heart attacks; increases in some diseases as tropical pests and other vectors acquire a greater range; and potentially devastating large-scale effects on ecosystems.

It will be many years — in fact, probably decades — before we fully understand how greenhouse warming will change our earth. Even so, what we know now is more than enough to support a conclusion that climate change is inevitable, and that we should do all we can, as soon as we can, to mitigate it.

Indeed, there is broad scientific agreement that, because greenhouse gases can remain in the atmosphere for hundreds of years, the longer we wait, the more difficult and costly it will be to protect our climate.

Other nations see and understand the severity of the threat, and many have already adopted domestic programs to reduce greenhouse emissions. Most countries now favor strong international action.

When countries gathered recently here in Washington at the UN conference to begin the negotiations on a climate change agreement, a long list of nations supported aggressive international action, including England, France, Germany, Denmark, Canada, the Netherlands, Australia, and many others.

With the single exception of Turkey, the US stood isolated among industrialized nations in its unwillingness to support stabilization and reduction of CO₂ emissions.

The Bush Administration unveiled a new "action plan" at the Washington conference. Unfortunately, the name is something of a misnomer, for the plan really calls for no action at all.

It establishes as a target that United States emissions in greenhouse gases will be no greater in the year 2000 than they were in the year 1987.

This is not ambitious. In fact, the plan envisions that this goal can be achieved mainly by waiting for reductions in greenhouse gases that will already be produced under the recently passed Clean Air Act, mostly as a result of limitations on ozone-depleting chlorofluorocarbon emissions.

Sadly, the plan includes no real long-term cap on greenhouse emissions, only a minuscule energy conservation program, and no program to limit emissions of

CO₂, the most important greenhouse gas.

The already very high level of CO₂ emissions from the US would be expected to increase under the plan by 15 percent by the year 2000, and 50 percent by 2015. Even more troubling, the plan includes no provision to restrict the expected increase of greenhouse emissions in general, through the next century.

The Administration's timidity is unnecessary. In fact, scientific and technical experts gathered at the United Nations' Second World Climate Conference last November in Geneva concluded that "technically feasible and cost-effective opportunities to reduce CO₂ emissions...are sufficient to allow many industrialized countries to stabilize CO₂ emissions and reduce these emissions by 20 percent by 2005."

Studies sponsored by the Department of Energy and the Environmental Protection Agency (EPA) confirm the feasibility and cost effectiveness of CO₂ reductions here in the US.

Data produced for EPA indicate that the US could reduce CO₂ emissions to 5 percent below current levels by the year 2000, while saving — that's right, actually saving — some \$40 billion per year.

This could be achieved by energy efficiency improvements, switching to natural gas as a fuel, and expanding renewable energy sources.

A newly released OTA study confirms that the US could reduce CO₂ emissions by 30 percent by 2015 using currently available technologies.

President Bush has in recent weeks repeatedly cited the responsibilities of international leadership that our nation must bear.

It is a refrain that resonates well in a nation that sees itself as a global leader. But US leadership has been distressingly scarce in the international effort to protect

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the planet from greenhouse warming.

It's time to take another look. The US alone is responsible for some 20 percent of the planet's greenhouse emissions.

We can and must abandon the "can't-do" attitude that has made our nation a central obstacle to international action on global warming. The longer we wait to start reducing greenhouse emissions, the more difficult it will be to put in place an effective program to stabilize our climate.