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Endangered Findings

The unsettled state of EPA's borrowed climate science.

Now that health care is done (for the time being), expect global warming to be high on the Obama administration's "to do" list. But cap-and-trade legislation and its alternative, a direct tax on carbon-based fuels, can't be passed via "reconciliation" and are far short of the needed 60 Senate votes.

As a result, the Environmental Protection Agency (EPA) is itching to step in and dictate how and how much we can drive, fly, consume, or make. This the agency made clear in its "endangerment finding," a necessary precursor to regulation, released last December.

Expect the administration to use 2010 global-temperature data as backup for the EPA's regulatory power grab. Global temperatures shot upward around the beginning of this year thanks to El Niño, a warming of the tropical Pacific that takes place every few years. The average global temperature has a reasonable chance of beating the last high, set back in 1998 (also an El Niño year).

Meanwhile, a number of studies point to sources other than greenhouse gases as explanations for the modest warming trend of the late 20th century. This could doom the EPA's finding. But do not expect it to go quietly.

The EPA did no scientific research of its own to buttress its endangerment finding, relying on the 2007 report of the United Nations' Intergovernmental Panel on Climate Change (IPCC) and a similar "Synthesis Report" from the U.S. Climate Change Science Program as the basis for its conclusions. According to these reports:

Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic [greenhouse gas] concentrations.

“Most” means “more than one-half,” and the IPCC says “very likely” means a probability of between 90 and 99 percent. This claim may have constituted the “settled” science of climate change in 2007, but things have become greatly unsettled since then.

The rise in global surface temperatures as measured by the Climate Research Unit at the University of East Anglia (yes, the “Climategate” folks) is 0.70 degrees Celsius since 1950, or a little over a tenth of a degree per decade. But the most recent refereed science literature argues otherwise.

Soon after the IPCC report, David Thompson and several others (including Climategate’s Phil Jones) published a paper in *Nature* showing a cold bias in measurement of sea-surface temperatures from the early 1940s through the mid 1960s. Accounting for this drops the rise in temperature to 0.55 degrees Celsius.

At the time of the IPCC report, Canada’s Ross McKittrick and I published a paper in the *Journal of Geophysics* showing that there was a clear and systematic “non-climatic” warming — from changes in land use and problems with station maintenance — in temperatures measured at weather stations. The bias isn’t all that much when measured globally, but it subtracts another .08 degrees Celsius, leaving 0.47 degrees Celsius.

Earlier this year, Susan Solomon of the National Oceanic and Atmospheric Administration published a bombshell in *Science* in which she argued that the lack of recent warming was likely due to fluctuations in water vapor way up in the stratosphere — changes that bear no obvious relationship to greenhouse-gas emissions. Given the limited stratospheric data that we have going back to 1980, her finding reduces the remaining trend to 0.41 degrees Celsius.

In 2008, V. Ramanathan of the Scripps Institute of Oceanography summarized the scientific literature on the emissions of black carbon (aka “soot”) and concluded this was responsible for about 25 percent of global warming. Carbon particles are *not* greenhouse gases. This drops the supposedly greenhouse-gas-caused warming to .31 degrees Celsius — 44 percent of the original 0.70.

Note that it’s not even necessary to bring in variations in the sun in order to ascribe more than half of the warming to non-greenhouse changes.

So, where are the studies refuting these findings? They don’t exist. The EPA is wrong. The IPCC was wrong, too, that it is “very likely” that “most” of the warming since 1950 is from greenhouse-gas changes. The EPA has lost the scientific linchpin of its proposal to regulate our lives.

While the president will surely brandish the El Niño–driven warmth of 2010 as the reason for the EPA to regulate where the Senate can no longer act, the EPA needs to accept that the “settled” science of global warming has shifted tectonically since the last IPCC report.

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