

# A Citizens Quick Guide to “Global Warming”

*This quick guide is based on a one-page condensation prepared by the Institute in 2006 to explain the issue to the Senate Natural Resources Committee. Five of the six committee members apparently did not make it all the way through to the end.*

1. “Global Warming” refers to an anthropogenic increase in global temperatures, that is, temperature increases integrated over the entire planet caused by human activity, such as the combustion of carbon fuels and release of methane, CFCs, and other greenhouse gases.
2. Over the past 10,000 years – following the retreat of the Ice Age – the planet has warmed by about 6 degrees C. Over the past 150 years – following the Little Ice Age (1400-1850) – the planet has warmed by about one degree C. The increase has not been monotonic. From 1940 to 1977 global temperatures decreased, even though atmospheric CO<sub>2</sub> concentration increased.
3. The greenhouse effect is a warming effect caused by release of greenhouse gases. Over 98 percent of greenhouse gas emissions come from water vapor, natural methane emissions (termites, decaying vegetation, animal flatulence), and forest fires.
4. Solar radiation cycles have an important effect on global temperatures. So do the Pacific and Atlantic Decadal Oscillations (shifts in ocean current patterns) and cosmic ray variation.
5. There is no empirical evidence that human activities have any detectable effect on global temperature trends.
6. The IPCC alarms about “Global Warming” are based on two computer models, called the “wet” and “dry” models (which do not agree). These models purport to show the consequences of a doubling of human-released CO<sub>2</sub> concentration. However the models do not correctly reproduce past, known temperature patterns. To counter this objection, the modelers arbitrarily adjusted parameters to fit the known curves. This is junk science.
7. The Kyoto Protocol promises to reduce anthropogenic CO<sub>2</sub> emissions to 1990 levels by 2015, while exempting China, India, and Brazil. To actually do this would require an enormous amount of controls and taxes on fuels. No country is willing to do this. The EU countries that have promoted Kyoto will all fail to meet their goals, save possibly for Britain (switching from coal to natural gas) and Germany (closing inefficient and dirty factories in the former East Germany.)
8. Even if Kyoto goals were attained worldwide, it would have almost zero effect on global temperatures in 2100.
9. If Vermont were to achieve the goal enacted in Act 168 of 2006 (by 2050, 75 percent less greenhouse gas emissions than in 1990), it would have no detectable effect on global temperatures. It would however dramatically increase energy prices to Vermont businesses and consumers, and would certainly require severe controls and much higher taxation. It would also favor rent-seeking interests like highly subsidized industrial wind power.
10. Cost-effective conservation of energy and improved energy efficiency are a clear benefit to society. The strongest incentive for conservation and efficiency is higher energy prices. Vermont state government should continue to educate energy users on the economic benefits of conservation and efficiency.

*John McClaughry, Ethan Allen Institute  
(A.B. physics, M.S. nuclear engineering)*

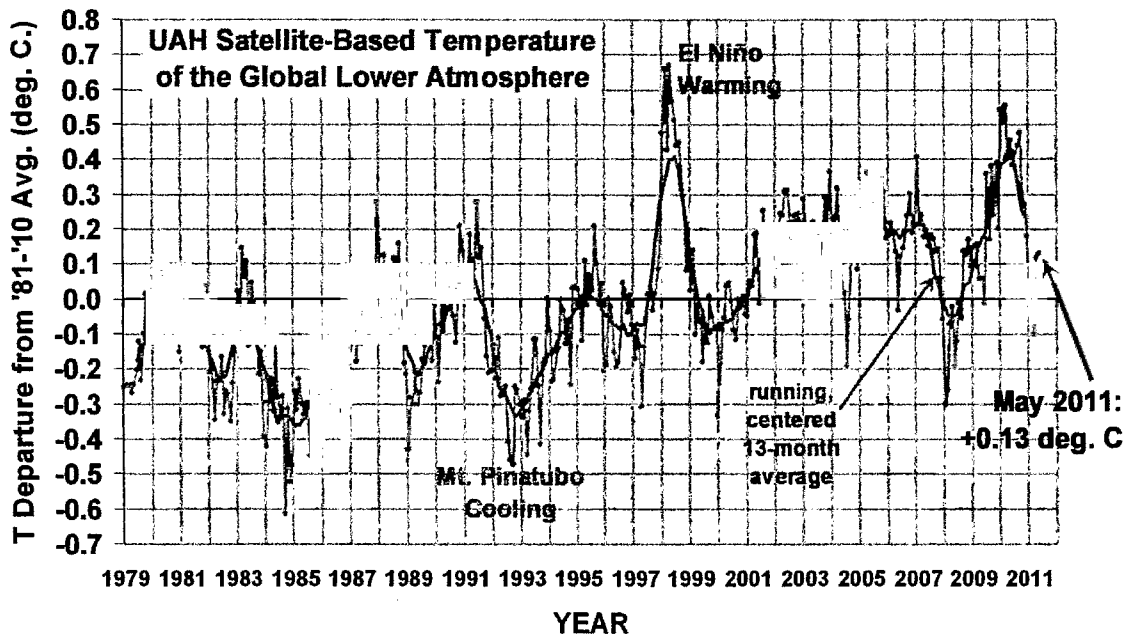


Fig 11: Satellite-MSU (global LT) data, independently verified by balloon radiosondes, show no significant 1979-1997 warming (contrary to Fig 10). Note the cooling from volcanic eruptions Agung 1963-64, El Chichon 1982, and Pinatubo 1991. [The MSU-UAH satellite temperature record of the University of Alabama-Huntsville has survived repeated attacks, launched because it disagreed so sharply with the surface record (that showed warming). Unlike competing analyses, MSU-UAH is supported by the independent data from balloon-borne radiosondes.]

### Global warming statement 1/3/07

"Planet earth warms and cools in many cycles, influenced by variations in the earth's orbit, the tilting and precession of the axis, solar irradiance, cosmic ray flux, solar magnetic fluctuations, oceanic decadal oscillations, cloud cover variations, and terrestrial emissions of water vapor, carbon dioxide, methane, volcanic ash and other gases.

From 1850 to 1940, long before anthropogenic carbon dioxide emissions became significant, the planet warmed significantly as it emerged from the Little Ice Age. Again since 1977 earth has experienced a slight global warming trend in the lower troposphere, where the greenhouse gas effect is greatest."

"There is no scientific evidence for detectable anthropogenic global climate forcing that produces these recurring effects; and there is little or no prospect that human intervention, even at enormous economic and social cost, can detectably alter the result of these natural processes."

John McClaughry [AB physics 1958 ,MS nuclear engineering 1960]