Global Warming and the Kyoto Protocol: A note

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Since 1976 the CO2 content of the atmosphere has increased steadily from 335 PPM to about 360 PPM. During the same period the average surface temperature of the earth has been rising. Coincident with the rise in CO2 and temperature has been an increase in human activity involving the burning of fossil fuels. The global warming hypothesis is that these events are causally related. Specifically, that burning fossil fuels increases the CO2 content of the atmosphere and that in turn causes the temperature to rise. It is further postulated that the rise in temperature will cause catastrophic climactic events and that the catastrophe can be mitigated by the implementation of a worldwide program to reduce CO2 emissions as prescribed in the Kyoto Protocol. These allegations have been sold so well through the media and repeated so many times that they have taken on an aura of truth. The real truth is that the alleged relationships are speculative and are not supported by the data.

Consider first the supposed relationship between atmospheric CO2 and temperature. From 1958 to 1976 atmospheric CO2 rose from 315 PPM to 335 PPM but there was no global warming during this period. In fact there was a significant global cooling, so much so that there was a real fear among our scientists of a coming ice age. There was no appreciable increase in CO2 from 1880 to 1940, yet it was a period of significant global warming. Taken together, these data do not support a causal link between CO2 and temperature. Even if there were a correlation, we would still be unable to draw a conclusion about causality because these are historical time series data taken as they occurred in nature. If historical variables X and Y are correlated then it could be that X causes Y or that Y causes X or that a third unobserved variable causes both X and Y or even that the correlation is purely coincidental without any causal link whatsoever. There is no way to tell without an experiment under controlled conditions.

Now consider the assumed causal relationship between the burning of fossil fuels and atmospheric CO2. The atmosphere and the ocean surface together contain about 1800 gigatons of carbon. Terrestrial vegetation contains about 600 gigatons and other critters about 1600 gigatons. The rate at which carbon is cycled through these living organisms by way of photosynthesis and metabolism exceeds 200 gigatons per year give or take 10%. It requires a stretch of the imagination to suggest that 6 gigatons of carbon per year from fossil fuels would upset this system. Fossil fuel's contribution of carbon is well within the estimation error and annual variance of the biological flux of 200 gigatons. One would think that the fossil carbon would become absorbed into the body weight of plants and animals and result only in a slightly larger biotic carbon inventory and flux.

There is some evidence of this effect. Fossils are actually dead creatures that were removed from the carbon cycle by geological changes. When we burn fossil fuels we return that carbon to the photosynthesis cycle from whence it came and it becomes part of living matter again. The carbon cycle is a self-correcting system because the existence of CO2 encourages plant growth and photosynthesis. Global warming researchers have speculated that carbon dioxide from human activity simply accumulates in the atmosphere but the data do not support this view. The honest answer is that we don't know why atmospheric CO2 is rising. It may have to do with the ratio of animal to plant life on the planet. Data from the northern latitudes show a seasonal cycle of 15 PPM. Atmospheric CO2 rises in autumn when vegetation defoliates and goes back down in the spring. Incidentally, this seasonal amplitude is equivalent to about 16 years of fossil fuel consumption.

Most research papers on this topic contain disclaimers that they don't really know what is going on with the carbon cycle; and in any case they do not have sufficient data or data of sufficient precision to come to the conclusions that they have proposed in their paper; and that their findings may be considered to be speculative in nature. These statements read carefully and

taken seriously cancel out the rest of the paper. Another problem with global warming research is that they are carried out or funded by organizations whose mission statements are biased in favor of the global warming hypothesis. Global warming research has taken on an evangelical fervor. These are people on a mission to promote an idea. Their work cannot be considered to be objective scientific inquiry because their mission subsumes their findings.

The Kyoto Protocol is based on the flawed global warming hypothesis. It requires all signatories to make significant economic sacrifices to reduce CO2 emissions. They have determined that if the Protocol is fully implemented global warming will be mitigated by 0.05C at the end of their timeline. The mitigation is insignificant and the threat is speculative but the economic sacrifices are real. The Protocol embraces an exaggerated notion of our importance on a planetary scale. Consider for example that a single hurricane releases more energy than the sum total of all the energy mankind has released so far by burning fossil fuels. There are good reasons for fuel conservation and pollution abatement but the reduction of CO2 emission is not one of them. CO2 does not pollute life. It is life itself and the pivotal point of organic reincarnation. All living things will someday be CO2 and all CO2 will once again be living organisms.

For the last two million years or so the earth has been mostly an icy planet. There have been brief interglacial periods lasting about 10 to 15 thousand years during which the earth warms and the ice melts. We live in one of these periods. It is by nature a time of climate change. We will return to the ice again. Our climate is a chaotic system. We will have to learn to survive in the chaos. If we expect sea levels to rise we should be building dikes and making re-settlement plans, not reducing CO2 emission. It would be a mistake to make economic decisions based on the idea that nature is at steady state and that a variance from that state implies the existence of an equal and unnatural cause.