

## **As Published On**

The Out-Lawyer's Blog: <http://www.jaygaskill.com/blog1>  
&

**The Policy Think Site:** <http://www.jaygaskill.com>

All contents, unless otherwise indicated are

Copyright © 2005, 2006, 2007 and 2008 by Jay B. Gaskill

Permission to publish, distribute or print all or part of this article (except for personal use) is needed. [Permission for use in group discussions is almost always routinely given.]

Please contact Jay B. Gaskill, attorney at law, via e mail at [law@jaygaskill.com](mailto:law@jaygaskill.com)

***What's a lawyer doing opining about climate change? A better question is what are the politicians doing? Yes, we trial lawyers suffer from the conceit that, with intensive study – a knack we acquire during litigation preparation – we can learn almost anything. My own attempts to learn more about “climate change” don't make me an expert, but they have persuaded me that the politicians (Mr. Gore included) don't know enough about the topic to inaugurate major changes in our current social and economic arrangements. The scientific consensus is overstated and any political consensus about large scale carbon regulation proposals is premature to say the least. The views expressed in this article are mine, the articles and sources cited are for comment purposes only – the copyrights belong to them – but the inaccuracies, if any, are mine.***

**JBG**

## ***Saint Gore and the ICE AGE***

### ***THE CASE FOR POLITICAL CAUTION***



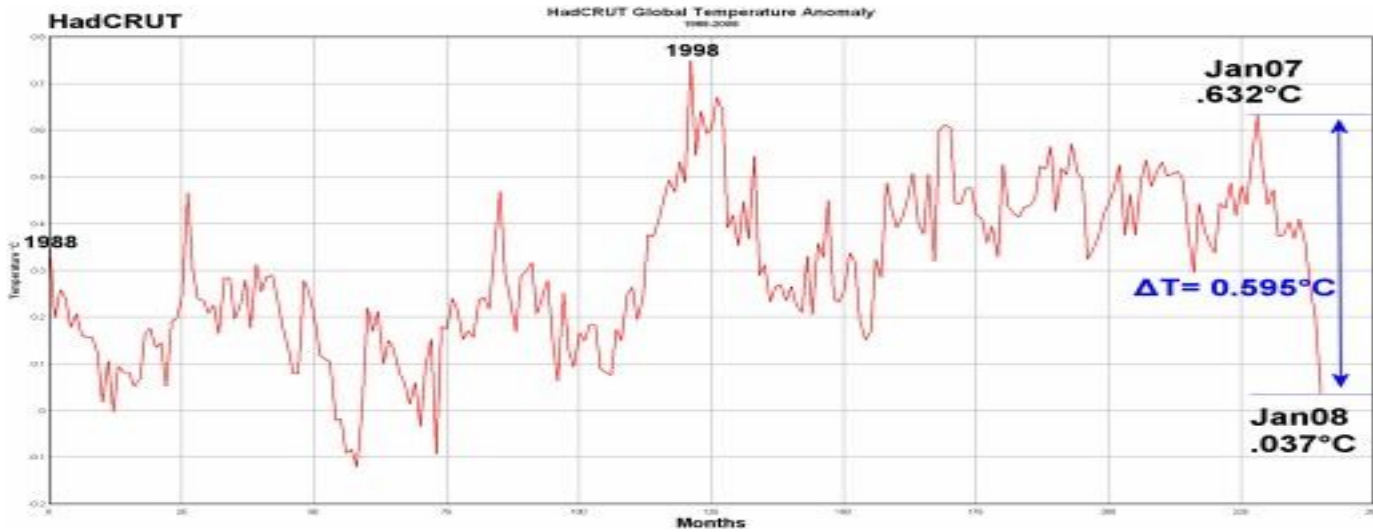
### ***Al Gore***

**“It is time to make peace with the planet. We must quickly mobilize our civilization with the urgency and resolve that has previously been seen only when nations mobilized for war.”**

### ***The Out-Lawyer***

**“Take a deep breath. What if the prophet is wrong? What if former Senator Gore has acted prematurely - relying on fatally incomplete information? The trouble with prophesy at this level is the inherent unpredictability of climate. Global climate change is not a simple issue, the science is far from settled, and the concerns about possible human-forced global warming do not define a war, and they definitely do not justify a religious crusade...”**

---



## **ABOUT TAKING A HARD LOOK BEFORE LEAPING**

**Heads up: Aggregate world temperatures seem to be **falling**.**

It is difficult for all of us “laypeople” to “get” climate science, especially during a period when legitimate scientific disputes become heavily politicized. Over geologic time, the earth has gone through huge temperature swings far exceeding those that have recently triggered alarm bells.

Ice ages come and go, but their duration is measured in the hundreds of thousands of years. The putative consensus about global warming is not matched by a scientific consensus about the factors that have periodically plunged our planet into those full bore cooling periods. The prevailing view among paleo-climate scientists is that the periodic ice ages are driven by very long term, periodic orbital changes that diminish the net available sunlight reaching the earth’s surfaces. But there are strong competing theories. The matter is not settled.

The warmer periods between ice ages are called interglacial periods.

Interglacial periods last approximately 10,000 years. During these periods, the earth gradually warms. When an interglacial period is over, the world cools until another ice age begins. Of course ice ages last many times longer than the interglacial periods. The current warming (which has only been measured with reasonable precision only during the last century or so) falls within an interglacial warming period. A century of reasonably accurate

measurement in geological time is like a couple of frames from a three hour movie

**There is some evidence, still premature for extrapolation purposes, that we are entering a cooling period consistent with the final end of the current interglacial warming.** [See my discussion and references below.] If we are really at the end of an interglacial period, the trend to another ice age will be increasingly robust.

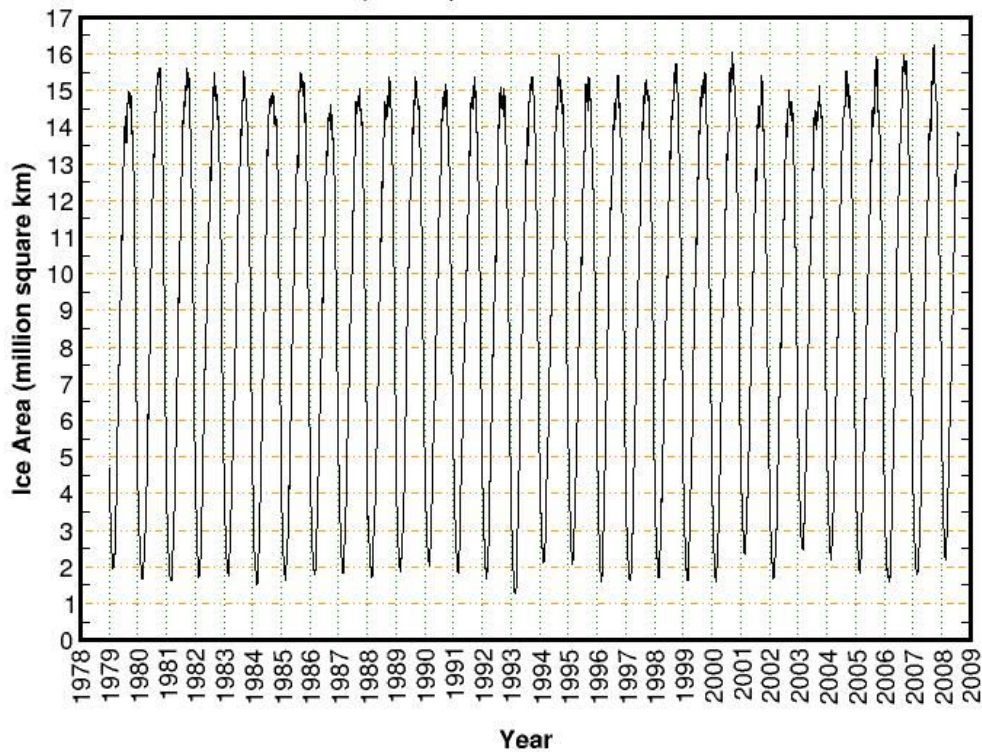
An aside here: How do we reconcile the pictures of recent dramatic ice melting – especially in Greenland and the Arctic Ocean – with new data showing a 2007 drop in aggregate temperature of roughly .6 degree Celsius? We do it in exactly the same way that the global warming theorists were able to reconcile particularly severe winter events with an overall increase in world temperature. There are always local variations. For example, although the Antarctic sea has spawned a great many icebergs, the main continental ice cap – that huge mass containing about 90% of the world's fresh water - continues to get thicker and thicker and the total ice area in the Southern Hemisphere has not diminished at all in the last ten years.

**“Over the past 20 years, southern sea ice has expanded, in contrast to the Arctic's decline, and researchers want to understand why. Many climate-model experiments show the Arctic responding more rapidly than Antarctica as global warming kicks in. But after looking at the latest projections from the Intergovernmental Panel on Climate Change, "Arctic sea ice is well ahead of the models, and Antarctic sea ice is well behind what the models project," says Stephen Ackley, a polar scientist at the University of Texas, San Antonio.”**

**Reporter Peter Spotts in the Christian Science Monitor, January 10, 2008.**

## Southern Hemisphere Sea Ice Area

Data provided by NSIDC: NASA SMMR and SSM/I



The CSM article went on to quote pro-global warming thesis experts who explained the thicker, bigger Antarctic ice as an effect of warming, but neither the reporter nor the experts quoted had yet seen the 2007 data reporting an overall planetary cooling. Yes, as I have already acknowledged, it would be premature to identify 2007 as the beginning of a long trend; on the other hand, it is prudent to consider the prospect that sometime in the next X years, the current 10,000 year (more or less) interglacial period will end. **How long is X?**

From the current Britannica article, we learn:

**“The glacial period that peaked 21,500 years ago was only the most recent of five glacial periods in the last 450,000 years. In fact, the Earth system has alternated between glacial and interglacial regimes for more than two million years, a period of time known as the Pleistocene. The duration and severity of the glacial periods increased during this period, with a particularly sharp change occurring between 900,000 and 600,000 years ago. Earth is currently within the most recent interglacial period, which started 10,000–11,000 years ago and is commonly known as the Holocene Epoch.”**

Now, I'm just a country lawyer, but ---

**It is important not to forget that we humans have adapted to large scale climate change over and over again, but that an ice age would pose more deadly challenges than any period of strong global warming.**

Climate scientists who are wedded to the human caused global warming thesis tend to handle the implications of these very recent developments by arguing that the amount of the current warming has been greater than can be explained by a mere interglacial period. They are also saying that climate forcing from human activity coupled with natural climate forcing is particularly bad for life on earth.

Here is the dirty little secret: The **specific** heat-forcing contribution by CO<sub>2</sub> gasses in the atmosphere has not actually been proved. Scientists are relying on an approximate correlation between temperature records for a geologically short period and incomplete atmospheric composition data. It is important to note here that water vapor is a much more powerful “greenhouse gas” than CO<sub>2</sub> and that it is prevalent in the atmosphere at many, many thousands times the CO<sub>2</sub> concentrations.

Ice cores trap gasses like CO<sub>2</sub>, but can't reveal water vapor concentrations over geological time frames. Before about 1900, all direct measurement data, especially of CO<sub>2</sub> concentrations and of statistically complete world temperatures is unreliable, when extrapolated to a global scale.

I am not a “global warning denier” (using the current epithet). Data are data. But the data are not conclusive yet. And surely, dialogue is still dialogue

## **ABOUT PREMATURE SAINTHOOD**

**The Roman Catholic tradition delays beatification until the candidate is safely dead. This has avoided a great deal of embarrassment over the centuries. In the larger Judeo-Christian tradition, major monuments, parks, bridges and other monuments are only named after someone has passed into history, so to speak, for the same wise reasons.**

The Nobel Prize committee and the boards and political bodies that name sports stadiums operate under an entirely different paradigm: They are after current impact, whether commercial, political or cause. Occasional embarrassment is an inevitable side effect.

Mr. Gore's fans and followers (at least the subset who continue to study the issue with an open mind) are a bit nervous at the moment because we are facing a 'perfect storm' in the form of four recent developments, the last of which (still under the radar) is the topic of this article.

Are you ready? The storm consists of:

1. An energy shortage-driven recession, possibly leading to a severe world-wide economic downturn;
2. a painfully acute oil and natural gas shortage that spares the well protected elites, while hitting the rest of us for whom higher utility costs, gasoline and other transportation costs actually affect the quality of life;
3. a growing realization that this energy-cost squeeze has been made much worse than necessary as a result of environmentalist political opposition to new energy development, including nuclear power;
4. and the breaking news that we may be headed into a prolonged cold period.

As I say, the last point is "pending". The UK's Hadley Climate Research Unit has recorded a major temperature decline in 2007, a report mirrored in several other world temperature aggregation research units.

To be fair, the Hadley group still fiercely clings to the global warming paradigm...

---

***ABOUT Global Cooling vs. Global Warming  
Reasonable Dissent is not only Still Possible, it is  
Critically Necessary***

The fervor and rhetoric of the global warming campaign is like a religious revival. It has struck a chord, in my opinion, less because of its merits (still in dispute as you will see below) but because the secular

intelligentsia everywhere yearns for an uplifting purpose to replace former religious aspirations, now moribund or dying.

But will any purpose do? Ersatz religions are dangerous. I smell the atmosphere of repression – the fierce marginalization of scientific dissent sounds to my ear too much like those medieval accusations of apostasy. The climate change discussion is not at a dialogue-friendly moment.

I am a great fan of alternative energy sources, but also of the prosperity that energy abundance can bring. Any set of proposals that contemplates our voluntary poverty is doomed politically and it is a terrible idea in any event. We need, above all, to be careful about our assumptions and always resist the impulse to smother dissent.

And we need to be more than a little wary about guilt-driven public policy proposals.

### **EXAMINE THE FOUR *WARM* ASSUMPTIONS**

Four interconnected assumptions drive the rhetoric of global climate change politics:

1. that there is an ongoing, long term global warming afoot;
2. that its overall effects are very harmful to the ecology in general and to human life in particular;
3. that this warming trend is primarily caused by human activities, the most significant and harmful of which are our CO<sub>2</sub> emitting engines, furnaces and industrial processes;
4. ...and that there is an urgent need to reverse the warming trend by enforcing mandatory curbs on all CO<sub>2</sub> emitting human activities.

The argument for the ‘immediate carbon regulation’ solution makes these claims:

- (a) That the temperature records from around the world show an overall increase in aggregate world temperature over the last century of about .8 degree Celsius;
- (b) that this warming is disruptive to the habitats of whole sets of animal and plant species; that it threatens to inaugurate polar and anti-polar

- ice cap melting, leading sea level increases that will eventually inundate low lying coastland occupied by large populations; and that the warming is responsible for changes in rainfall patterns that, unless checked or reversed, will profoundly disrupt agriculture.
- (c) that this temperature increase closely track increases in atmospheric CO<sub>2</sub> which in turn were caused by human industrial activities;
  - (d) ---and that there is therefore an urgent need to curb all CO<sub>2</sub> and other “greenhouse gas” generating human activities as soon as possible.

The claim about the warming trend over the last century or so was generally accurate – at least through 2006. Yet some intriguing exceptions have surfaced – I’ll get to them in a moment. The three remaining points are overstated.

The global warming/climate change issue tends to be framed by the most passionate believers as “debate won - we have already arrived at a scientific consensus”. This assertion is used to marginalize any further argument about the merits. We are asked to believe that we are already at step two in the discussion – working to a new consensus about the means to achieve ‘carbon control’, that ‘the case is made, now let’s get on with addressing the carbon crisis’.

But there is much more to the climate change debate

## **LOOK AT SIX Uncomfortable FACTS**

There are six facts relating to the warming question about which there is little scientific disagreement, yet they are rarely discussed:

1. CO<sub>2</sub> is unlike most other more potent ‘greenhouse’ gasses (especially water vapor which more prevalent in the atmosphere by several orders of magnitude) because **CO<sub>2</sub> is a trace gas, measured in parts per million.**
2. There still has been **no physical experiment that has quantified the claimed/predicted the greenhouse warming effect of CO<sub>2</sub> gas with sufficient precision to be useful in mapping or predicting large scale climate change.** To accomplish that feat, any experiment would need to be able to measure the CO<sub>2</sub> heat-trapping effect in a variety of atmospherically plausible concentrations such that the results that

could be reliably scaled up to a column of air exposed to solar radiation over several vertical miles from sea level pressure to say, 20,000 feet. Any experiment in a truly realistic climate-forcing scale is not feasible with current technology. **However, a coordinated array of real time measurements that capture CO2 and other greenhouse concentrations and solar radiation levels at a large variety of altitude samples might yet be done. But so far the attempt to quantify the large scale, real world warming effects of atmospheric CO2 is based on guesswork only.**

3. **No computer climate modeling yet reported has been able to account for and “retrodict” geologically past warmings and coolings with enough accuracy to plausibly “predict” the current warming trend, especially at the end of an interglacial period and over the micro-time frame (geologically speaking) of a mere 100 years.**
4. Ice core data going back millions of years have shown that CO2 concentrations are indeed correlated to global warming trends, but they are a **lagging** indicator. That is to say that **CO2 increases were measured as following temperature increases by about 800 years, not preceding them.**
5. And the recent 100 year warming period was not uniform. There were cooling periods, one of which led scientists in the early 1970’s to predict a new ice age was on the way. And it turns out that **the year 2007 was a cooling year, one in which the aggregate change in temperature was about .6 degree Celsius colder.** [If this continued unabated – borrowing from the warming hysteria rhetoric – we’d soon be in a devastating ice age.]
6. **Why not focus on methane?** After all, it is a much more potent greenhouse gas than CO2. Here is the answer, in part:

**Plants revealed as methane source by Tim Hirsch, BBC, 1-11-06**

**Scientists in Germany have discovered that ordinary plants produce significant amounts of methane, a powerful greenhouse gas which helps trap the sun's energy in the atmosphere. The findings, reported in the journal Nature, have been described as "startling", and may force a rethink of the role played by forests in holding back the pace of global warming. And the**

**BBC News Website has learned that the research, based on observations in the laboratory, appears to be corroborated by unpublished observations of methane levels in the Brazilian Amazon. Until now, it had been thought that natural sources of methane were mainly limited to environments where bacteria acted on vegetation in conditions of low oxygen levels, such as in swamps and rice paddies.**

**In other words, human industrial activity is not the major source of atmospheric methane.**

**This is why there is still room for a healthy measure of skepticism about the claim that human generated CO<sub>2</sub> has driven the warming trend of the last 100 years.**

There are three additional points that have solid support within the scientific community, yet they have not yet found their way into 'legitimate' global warming debate because they tend to undercut the approved narrative:

- A. Changes in solar radiation have caused and continue to generate significant effects on world cooling and warming patterns, in many instances swamping the effects of greenhouse gas climate forcing. **The recent cooling pattern was correlated with changes in solar activity** and may portend (i.e., science cannot rule out) a much longer cooling trend.
- B. World climate change (including warming and cooling patterns) are more strongly tied to changes in the oceans – shifting currents and ocean temperature fluctuations – than any other single factor. **Warmer oceans**, for example, outgas more water vapor, which in turn operates as a potent greenhouse gas. Oceans are particularly sensitive to changes in solar radiation. Moreover, oceans may even heat up independently via sub-oceanic volcano activity. Sub-sea volcanic activity as a plausible factor in ocean warming was underestimated by several orders of magnitude until very recently.
- C. **Large scale global cooling is far more dangerous** to ecosystems and human survival than global warming.

**PLEASE NOTE: I'm not making the claim that human - forced global warming has been "disproved" or that the whole thing is a hoax. But I am persuaded that there are additional findings and concerns that**

justify a much more cautious approach to political intervention on the side of strong “carbon remediation” measures. This is especially the case if we are about to experience a prolonged cooling period.

## **THE WATCH LIST**

Here are three of the pending issues that will probably be in sharp dispute for a while. Watch these closely:

[1]

Europe suffered a famous “Little Ice Age” that lasted from 1150- to 1850, dramatically reducing arable land and the growing season, resulting in famine, death, illness and social unrest. This multi-century climate event was correlated with the so called “Maunder Minimum” a period of reduced solar activity.

**Q: Is this happening again?**

**In an interview in 2004 --**

**“Gary Rottman ... Principal Investigator and a scientist at the Laboratory for Atmospheric and Space Physics at the University of Colorado at Boulder... [measured] greater reductions in the Sun’s energy coming Earthward during .... a record-breaking string of solar flares. At one point, sunlight dimmed 0.3 percent for about four days, due mostly to three large sunspot groups.**

**“This is an unprecedented large decrease in the amount of sunlight,” Rottman said, and it is comparable to the decrease that scientists estimate occurred from roughly 1645 to 1715. During a broader period, from the 1400s to the 1700s, Europe and North America were plunged into what came to be called the Little Ice Age**

**“The reduced solar activity of the 1600s and 1700s is called the Maunder minimum, after the solar astronomer Edward Walter Maunder, who during the 1800s investigated the historical sunspot records.**

**“Nobody knows for sure why it occurred or whether it will happen again anytime soon. In fact, the whole concept remains controversial, because it’s not clear how well astronomers were counting sunspots during the Maunder minimum. And the exact tie to climate is not understood. Most tend to agree, however, that there was a distinct lack of solar activity.**

**“Something very different was happening during the 17th Century, and it produced a much more permanent change in the Sun’s energy output at that time,” Rottman said.”**

**Check these two “Maunder Minimum” references at these links --**

[http://www.space.com/scienceastronomy/natural\\_sunblock\\_040802.html](http://www.space.com/scienceastronomy/natural_sunblock_040802.html)

<http://science.jrank.org/pages/4184/Maunder-Minimum.html>

**And note the following --**

**“Early records of sunspots indicate that the Sun went through a period of inactivity in the late 17th century. Very few sunspots were seen on the Sun from about 1645 to 1715. Although the observations were not as extensive as in later years, the Sun was in fact well observed during this time and this lack of sunspots is well documented. This period of solar inactivity also corresponds to a climatic period called the “Little Ice Age” when rivers that are normally ice-free froze and snow fields remained year-round at lower altitudes. There is evidence that the Sun has had similar periods of inactivity in the more distant past. The connection between solar activity and terrestrial climate is an area of on-going research.’**

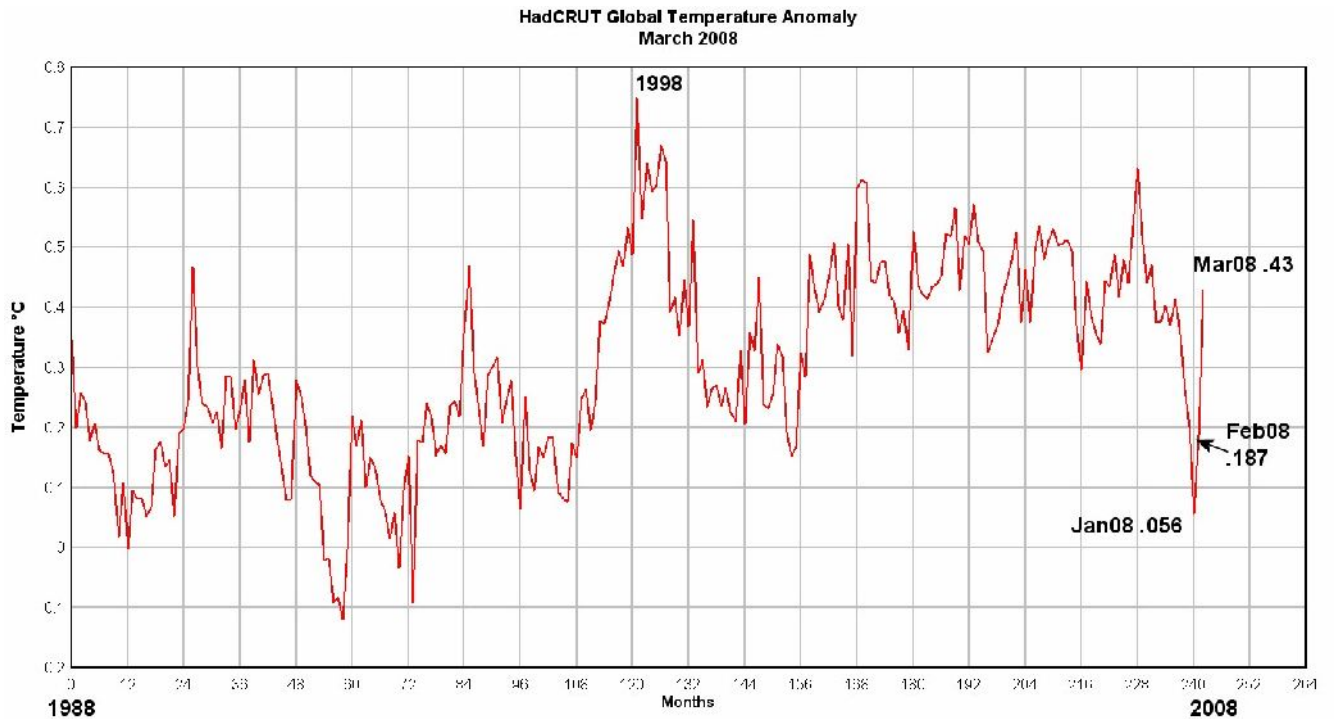
**NASA at <http://solarscience.msfc.nasa.gov/SunspotCycle.shtml>**

**[2]**

**Will the 2007 cooling trend continue?**

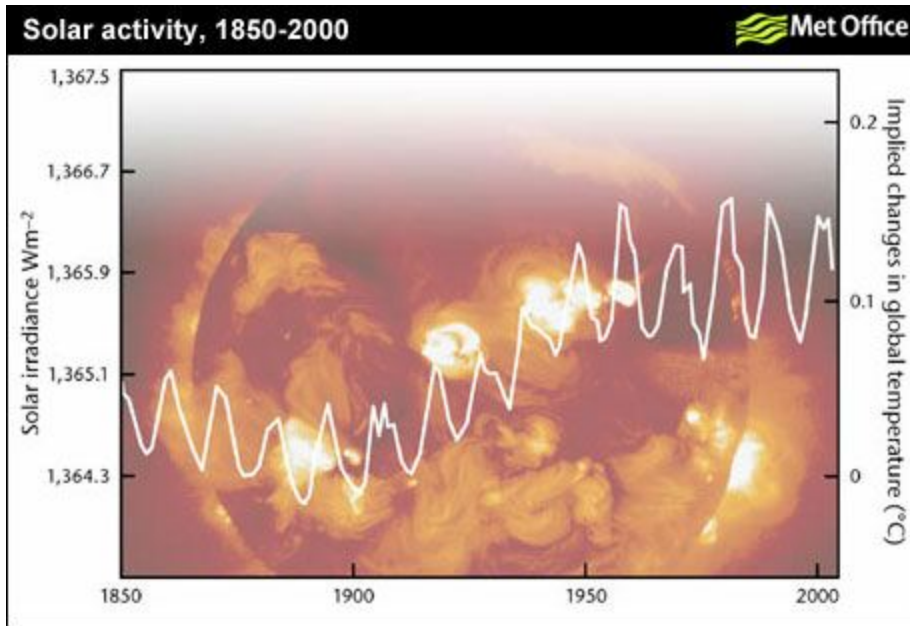
At the UK’s Hadley Climate Research Unit Temperature anomaly (HadCRUT) Dr. Phil Jones and others are cautious about making too much of a single year.

We also need to look at Hadley’s MARCH chart:



All this raises the question: If the cooling trend continues for two or more years, when should we be cautious about overdoing costly carbon regulation? **If it the cooling does continue, say over five years, may we conclude that the global warming political thesis is disproved -- or only that the human-caused warming trend is temporarily being masked by another effect?**

**The Hadley group disputes the theory that changes in solar radiation can account for changes of this magnitude. The chart that follows is theirs:**



**Notice a possible downtrend in solar radiation at the very end. Recall that the so called “Maunder Minimum” is credited with inaugurating the so called ‘Little Ice Age’, a multi-century cooling period that drove the Vikings out of Greenland and froze the Thames River in England. As I referenced above:**

**“The Maunder minimum is the name given to a period of extreme solar inactivity that occurred between 1645 and 1710. Of particular interest is that this period of inactivity corresponds closely to one of the coldest periods of the so-called ‘Little Ice Age’ in Europe, a time of long, cold winters that caused severe hardships in the pre-industrial revolution world. This has led scientists to extensively study the possible influences of solar activity on terrestrial climate, as well as examine other stars for evidence of activity cycle behavior similar to the Sun's.”**

In a recent story, it appears that only a very few scientists are worried at the moment. As Andrea Thompson, senior writer for “Space.com” reported on July 11, 2008”

**“The sun's surface has been fairly blank for the last couple of years, and that has some worried that it may be entering another Maunder minimum, the sun's 50-year abstinence from sunspots, which some scientists have linked to the Little Ice Age of the 17<sup>th</sup> century.**

**“Could a new sunspot drought plunge us into another decades-long cold spell?**

**“It's not very likely, says David Hathaway a solar physicist at NASA's Marshall Space Flight Center in Huntsville, Ala.**

“The question came up after an international solar conference held last week at Montana State University, where scientists discussed the dearth of solar activity in the last couple years.

“It continues to be dead,” said Saku Tsuneta with the National Astronomical Observatory of Japan and program manager for the Hinode solar mission. ‘That’s a small concern, a very small concern,’ because the period of inactivity seems to be going on longer than normal. Some scientists think such inactive periods, such as the Maunder minimum, are responsible for cold spells in the past, such as the Little Ice Age.”

Yes, the solar inactivity is going on longer than usual. Why not wait and see?

[3]

Given the complexity of the issue, the practical policy issues are not at all simple either. For example, what can or should this country do to attempt to reverse global warming in light of the Chinese and Indian new industrial development – a prosperity-driven pace of industrial development that far outstrips the comparable growth in the developed western countries? China and India are projected to increase global CO2 even if Europe and the US achieve significant CO2 reductions. Unless and until we are prepared to massively move the first, second and third world economies into a nuclear-electric-hydrogen hi-tech model, carbon emitting energy sources will rule the planet whatever we choose to do in our own backyards.

## **A PROVISIONAL BOTTOM LINE**

**C\*A\*U\*T\*I\*O\*N**

### **THE “CARBON PROBLEM”**

It is important to make distinctions between human industrial activity and those other human activities that might alter climate – notably land use, deforestation and farming, because changing behaviors in the latter category will prove almost intractable – imagine advocating a dramatic curtailment of farming while there is a food shortage.

And the subset of “industrial” CO<sub>2</sub> emissions, i.e., from vehicles and furnaces, cannot account possibly for most of the ambient CO<sub>2</sub>. A single major volcanic event has been shown to emit more CO<sub>2</sub> into the atmosphere over a few weeks than human industrial contributions over the same period.

A robust debate about global warming should continue as long as we can't say with a high degree of certainty that industrial CO<sub>2</sub> emissions are the primary climate drivers in the current warming trend.

So what have I personally gleaned from the various published sources? I am persuaded, at least for now, that ***global heat forcing*** over the last several decades can be roughly sorted into three groups:

1. Industrial CO<sub>2</sub>: Probably not more than 20%
2. Solar flux radiation: Certainly not less than 20%
3. All other influences: Sub-oceanic volcanic activity, natural greenhouse gasses such as methane and water vapor; earth orbital cycles associated with the ice ages and interglacial periods; unknown factors: **About 60%.**

In other words, given the overall pattern, we'll undoubtedly have to spend most of our time and resources learning to adapt to climate changes over which we have very little effective control. Why, in my opinion, are the “mainstream” estimates are far too generous for the industrial CO<sub>2</sub> forcing effects? There are several reasons, but these four stand out:

- (a) Decaying vegetation, out-gassing oceanic CO<sub>2</sub> and natural fires introduce many times more CO<sub>2</sub> into the atmosphere (not to mention methane) than all industrial activities.
- (b) The actual heat trapping effects of CO<sub>2</sub> have not been experimentally verified on any realistic scale or situation. Therefore there is no clear scientific basis to plug in a particular number that quantifies the global effect of a particular change in CO<sub>2</sub> atmospheric concentration (all measured in parts per million) except guesswork.
- (c) Ice core analysis covering hundreds of thousands of years still seems to show that CO<sub>2</sub> concentrations follow global temperature increases **by about 800 years**. This makes CO<sub>2</sub> a more likely lagging indicator of warming than a cause. The “anomaly” has yet to be satisfactorily explained. **The primary argument by pro CO<sub>2</sub>-forced-warming advocates goes something like this: Interglacial warming accounts for the first 800 years of higher temperatures, causing out-gassing**

of trapped oceanic CO<sub>2</sub>, which then accelerates the warming trend and so on. For a version of this argument, go to this link: <http://www.realclimate.org/index.php/archives/2004/12/co2-in-ice-cores/>. There seems to be no way to test or verify this notion at present.

- (d) A mutual hysteria feedback loop has developed among the groups of “forward looking” opinion leaders who are suffering from lacunae in critical judgment and serious gaps in economic knowledge. Their unspoken assumptions are that the warming problem is potentially very serious (ignoring the even more serious problems attendant global cooling) and that the costs of aggressively dealing with the “warming” issue are relatively minor (ignoring the staggering economic negative impacts).

## **MAKING THE CASE FOR POLITICAL C\*A\*U\*T\*I\*O\*N**

**We just don't know enough about the natural and human climate change drivers to make huge changes in our social arrangements at the moment. This is especially so, because we can't really know yet whether the changes will or won't make things worse.**

**This leaves those energy development options about which both sides (the ‘energy independence’ crowd and the ‘overheated world’ crowd) might still agree.**

**Fortunately, it is a promising list.**

**By all means let's pursue the wide use of electric motors powered by non-hydrocarbon fuel sources like nuclear power plants; indeed, let's press forward with generation IV nuclear reactors; let's invest in more efficient electricity transmission and storage technologies; let's make and promote better solar power, electric cars and hydrogen cars. And let's aggressively pursue any and all energy production technologies (from fusion to high tech coal-to-natural gas and hydrogen processes), that will increase energy supplies without relying on the politically unstable Middle East. That is the only available consensus.**

**Some of us are serious about keeping up with the subject, in spite of the current quasi-religious doctrine that brooks no dissent – the new religion that treats global climate change as a settled moral issue with settled moral solutions. If this piece has aroused your curiosity, then join me in consulting more widely and critically.**

**Yes, the web is a rich source of information -- but it also teems with misinformation. So a critical approach is always needed. For the moment, I would tend to trust NASA over CNN, MIT over the DNC or RNC, and I would credit the research and analysis of working scientists over those who are politically connected.**

**But critical thinking requires that you become self-informed. Take the time to study the underlying science involved, always seeking out a dissenting position as well as the mainstream one. Then use your critical thinking skills. Remember: Public policy is made by political leaders who are only superficially familiar with the science – you can do at least as well as they can in keeping up.**

**This is an evolving area. You can be certain that science hasn't come up with the last word.**

---

***There are several interesting web sources and links. Here are a few:***

***RE: Cooling and CO2 forcing vs. Solar Radiation Variations***

<http://www.ibdeditorials.com/IBDArticles.aspx?id=287279412587175>

<http://www.cgfi.org/2008/05/05/satellite-indicates-23-year-global-cooling/>

<http://www.heartland.org/Article.cfm?artId=23556>

[http://www.boston.com/bostonglobe/editorial\\_opinion/oped/articles/2008/01/06/br\\_r\\_r\\_w\\_here\\_did\\_global\\_warming\\_go/](http://www.boston.com/bostonglobe/editorial_opinion/oped/articles/2008/01/06/br_r_r_w_here_did_global_warming_go/)

[http://www.spacecenter.dk/publications/scientific-report-series/Scient\\_No.\\_3.pdf/view](http://www.spacecenter.dk/publications/scientific-report-series/Scient_No._3.pdf/view)  
[note - follow the link then click on adobe file]

## **THE APPENDIX**

### **EXCERPTS FROM THE SPEECH BY AL GORE WHEN HE ACCEPTED THE 2007 NOBEL PEACE PRIZE**

#### **NORWAY**

...

**I have a purpose here today. It is a purpose I have tried to serve for many years. I have prayed that God would show me a way to accomplish it.**

...

**We, the human species, are confronting a planetary emergency - a threat to the survival of our civilization that is gathering ominous and destructive potential even as we gather here. But there is hopeful news as well: we have the ability to solve this crisis and avoid the worst - though not all - of its consequences, if we act boldly, decisively and quickly.**

...

So today, we dumped another 70 million tons of global-warming pollution into the thin shell of atmosphere surrounding our planet, as if it were an open sewer. And tomorrow, we will dump a slightly larger amount, with the cumulative concentrations now trapping more and more heat from the sun.

As a result, the earth has a fever. And the fever is rising. The experts have told us it is not a passing affliction that will heal by itself. We asked for a second opinion. And a third. And a fourth. And the consistent conclusion, restated with increasing alarm, is that something basic is wrong.

... unlike most other forms of pollution, CO2 is invisible, tasteless, and odorless -- which has helped keep the truth about what it is doing to our climate out of sight and out of mind. Moreover, the catastrophe now threatening us is unprecedented - and we often confuse the unprecedented with the improbable.

We also find it hard to imagine making the massive changes that are now necessary to solve the crisis. And when large truths are genuinely inconvenient, whole societies can, at least for a time, ignore them. Yet as George Orwell reminds us: "Sooner or later a false belief bumps up against solid reality, usually on a battlefield."

...without realizing it, we have begun to wage war on the earth itself. Now, we and the earth's climate are locked in a relationship familiar to war planners: "Mutually assured destruction."

.....

We must quickly mobilize our civilization with the urgency and resolve that has previously been seen only when nations mobilized for war. These prior struggles for survival were won when leaders found words at the 11th hour that released a mighty surge of courage, hope and readiness to sacrifice for a protracted and mortal challenge.

These were not comforting and misleading assurances that the threat was not real or imminent; that it would affect others but not ourselves; that ordinary life might be lived even in the presence of extraordinary threat; that Providence could be trusted to do for us what we would not do for ourselves.

.....

Now comes the threat of climate crisis - a threat that is real, rising, imminent, and universal. Once again, it is the 11th hour. The penalties for ignoring this challenge are immense and growing, and at some near point would be unsustainable and unrecoverable. For now we still have the power to choose our fate, and the remaining question is only this: Have we the will to act vigorously and in time, or will we remain imprisoned by a dangerous illusion?

.....

We must abandon the conceit that individual, isolated, private actions are the answer. They can and do help. But they will not take us far enough without collective action. At the same time, we must ensure that in mobilizing globally, we do not invite the establishment of ideological conformity and a new lock-step "ism."

....

When we unite for a moral purpose that is manifestly good and true, the spiritual energy unleashed can transform us.

....

We must understand the connections between the climate crisis and the afflictions of poverty, hunger, HIV-Aids and other pandemics. As these problems are linked, so too must be their solutions. We must begin by making the common rescue of the global environment the central organizing principle of the world community.

....

**We also need a moratorium on the construction of any new generating facility that burns coal without the capacity to safely trap and store carbon dioxide.**

**And most important of all, we need to put a price on carbon -- with a CO2 tax that is then rebated back to the people, progressively, according to the laws of each**

**nation, in ways that shift the burden of taxation from employment to pollution. This is by far the most effective and simplest way to accelerate solutions to this crisis.**

The world needs an alliance - especially of those nations that weigh heaviest in the scales where earth is in the balance. I salute Europe and Japan for the steps they've taken in recent years to meet the challenge, and the new government in Australia, which has made solving the climate crisis its first priority.

....

The great Norwegian playwright, Henrik Ibsen, wrote, "One of these days, the younger generation will come knocking at my door."

**The future is knocking at our door right now. Make no mistake, the next generation will ask us one of two questions. Either they will ask: "What were you thinking; why didn't you act?"**

....

□□□



**August 7, 2015?**



## ***THE FINAL CAUTIONARY NOTE***

Yes, Mr. Gore, the future is “knocking at our door”. I hate it when it does that. As I wrote in my 2007 article -- (<http://jaygaskill.com/InconvenientChoice.htm> ),

Having acknowledged the possibility that we humans have really “littered in our nest” this time, it remains very plausible that changes in solar radiation may account for more than half of the warming trend. The remaining questions concern balance: that between maintaining robust economic and technological progress and mitigating any environmental harm that human activities cause to ourselves and our surroundings. At some point in our future the temptation to attempt control of the earth’s climate will be too great to resist. But we are not yet ready for the big time. Given the present level of incompetence, for the UN or a subgroup of nations to seriously engage in a program of global climate alteration is like allowing a group of hormone saturated teenagers to hack the source code and operating system of a major bank...

**JBG**