The Climate Emperor's New Clothes: The Current Status of the Climate Change Debate

Steven F. Hayward F.K. Weyerhaeuser Fellow American Enterprise Institute

Paper/Presentation Prepared for Hillsdale College Free Market Forum 2010,
Dearborn, Michigan, October 1, 2010

As they review the bizarre and unpredictable weather pattern of the past several years, a growing number of scientists are beginning to suspect that many seemingly contradictory meteorological fluctuations are actually part of a global climatic upheaval. However widely the weather varies from place to place and time to time, when meteorologists take an average of temperatures around the globe they find that the atmosphere has been growing gradually cooler for the past three decades. The trend shows no indication of reversing. Climatological Cassandras are becoming increasingly apprehensive, for the weather aberrations they are studying may be the harbinger of another ice age.

Time Magazine, June 24, 1974.1

_

¹ http://www.time.com/time/magazine/article/0,9171,944914,00.html

The course of climate change science and politics over the last year represents the most astonishing political and scientific reversal since Galileo's vindication of Copernican astronomy 400 years ago propelled the scientific revolution. Two years ago, coming off the latest U.N. report proclaiming that the evidence for man-made global warming was "unequivocal," Al Gore's Nobel Peace Prize, the imminent election of Barack Obama, and the UN's Copenhagen climate conference several years in preparation that was expected to produce a new, binding global treaty, it appeared that the momentum for the climate campaign was unstoppable. With the obstructionist George W. Bush and the obstreperous climate no-nothings put to rout, there was nothing standing in the way of the long-cherished green goal of extending massive new political control over energy resources on the national and international scale.

But a funny thing happened on the way to the green utopia. The climate campaign didn't just hit a speed bump—it broke its axels and drove off the road into a ditch. Three major inflection points have occurred in the last year. First came the disclosure of the e-mails and technical documents of the Climate Research Unit at East Anglia University in England, the document dump that came immediately to be known as "Climategate," or what I liked to call the climate campaign's ACORN moment. Climategate" has done for the climate change debate what the Pentagon Papers did to the Vietnam War debate 40 years ago—changed the narrative decisively. Additional revelations of unethical behavior, retractions of errors, and exposures of serial exaggeration in climate science began rolling out on an almost daily basis, and there is good reason to expect more revisions to come.

Second, even before the UN Copenhagen conference convened last December, it was evident that it was running into trouble, in part because Europeans were starting to have difficulty squaring the hypocrisy of their green pronouncements and their economic self-interest, but in larger part because the two most important developing nations, India and China, nations with no margin for feel-good economic nonsense, refused to knuckle under to the climate campaign's insistence that they agree to hobble their energy use. Not even the 11th hour intervention of the magically charming President Obama was enough to prevent the ignominious collapse of the entire UN edifice. This, by the way, made Obama 0 for 2 in Copenhagen; he went to Copenhagen in October trying to secure the 2016 Olympics for Chicago, and got stiffed by the International Olympic Committee practically before the wheels were up on Air Force One during the return trip, which at the time I called the worst Olympic performance since the Jamaican bobsled team in 1988.

Third, the keystone of the climate campaign's agenda in the U.S.—the cap and trade system painstakingly promoted for over a decade—has collapsed in the U.S. Senate, in part because the basic political calculation behind the famous Byrd-Hegel resolution of 1997 in which the Senate pre-emptively voted 97 – 0 against the Kyoto Protocol is still in place today, and in part because of the Obama Administration's complete indifference to the proposal—a benign neglect that is only dimly becoming apparent to the environmental community. Environmentalists had swallowed hard, and agreed to a number of concessions they never would have agreed to under a Republican president in order to get cap and trade over the finish line. They were under orders from Rahm Emanuel, who told environmentalists to shut up and fall in

line you green mother-earth frog-lovers—or words to that effect. Now to their astonishment environmentalists are facing the ironic probability that had John McCain won the 2008 election, we'd have some form of cap and trade in place by now, as McCain made the issue a priority of his and would have placed it ahead of health care reform on his agenda.

Despite these three favorable developments of the last year, we're not out of the woods, as the experience of health care should teach us. Twice in my lifetime I thought the chances of nationalized health care were dead for good—first with the election of Ronald Reagan in 1980, and then with the rout of Bill Clinton on this issue in 1994. And yet here we are in 2010 with the *fait accompli* of Obamacare. The environmentalist drive to acquire unlimited power over people and resources is irrepressible, so we should expect a regrouping renewed assaults on free markets and material progress.

Let us treat these three inflection points in order. First, "Climategate," or what one wit called "the CRUtape Letters." In November of last year, a large cache of e-mails and technical documents were either hacked or leaked by an inside whistleblower from the Climate Research Unit (CRU) at East Anglia University in Britain. The e-mails—more than 1,000—reveal a small cabal of scientists who, in the words of MIT climatologist Michael Schrage, engaged in "malice, mischief and Machiavellian maneuverings." In an ironic twist, one of the frequent correspondents in this long e-trail (University of Arizona scientist Jonathan Overpeck) warned several of his colleagues in September, "Please write all emails as though they will be made public." Small wonder why.

The content of the e-mails do not in and of themselves reveal that catastrophic climate change scenarios are a hoax or without any foundation. What it reveals is more problematic for the scientific community as a whole, namely, the tendency of scientists to cross the line from being disinterested investigators after the truth to advocates for a preconceived conclusion about the issues at hand. In the understatement of the year, CRU's Phil Jones, the head of the CRU and one of the principal figures in the controversy, admits the e-mails "do not read well." Iones is the author of the most widely cited e-missive, telling colleagues in 1999 that he had used "Mike's *Nature* trick" to "hide the decline" in an inconvenient temperature series record that occurs after 1960, but that the full context of their work shows this was just a misleading figure of speech. Reading through the entire archive of emails, however, provides no such reassurance; to the contrary, dozens of other messages, while less obviously inflammatory than "hide the decline," expose the full depth of this scandal. The complete e-mails also reveal that even inside this small circle there was considerable disagreement, confusion, doubt, and at times acrimony over the results of their work.

On the substance of climate science itself, the Climategate story is overwhelmingly about one small but very important subfield—paleoclimatology—that turns out to be a massively complicated exercise in statistical manipulation of huge amounts of raw data. Because the gap between observation and conclusion in this subfield is so dependent on statistical techniques rather than direct

measurement, it was bound to be a matter of intense controversy and deserved the most searching review by outside scientists. It is exactly this kind of review that the CRU insiders acted to prevent or obscure.

Climate change is a hugely complicated phenomenon, and the effort to understand it is arguably the largest scientific undertaking ever conducted by the world's scientific community. The CRU at East Anglia is one of the principal hubs of climate science, whose work plays a prominent role in the UN's Intergovernmental Panel on Climate Change (IPCC), the body that produces every five years or so a massive report on the "consensus" about climate science. This is the body about which it is always said comprises over two thousand of the world's top scientists, even though there are many thousands more scientists working on aspects of climate change who do not participate in the IPCC process, many of whom dissent from the rigid "consensus" line. One of the things the CRU e-mails prove is that the oft-cited figure of "2,000 of the world's top scientists" is misleading; the circle of genuine active scientists in the work of CRU and related U.S. institutions is very small. Nonetheless, Al Gore and other climate campaigners use the IPCC report to declare the matter "settled," even though, in the last IPCC report on the science of climate change in 2007, the term "uncertain" or "uncertainty" appears over 1,300 times in 900 pages, and describes our level of scientific understanding of key aspects of climate as "low" or "very low." The IPCC chapter on the climate models that are the principal tool to predict our future doom admits that there are "significant uncertainties" in all the models, and that "models still show significant errors."

There have been rumors for years about political pressure being brought to bear on the process to deliver scarier numbers, because the effects of a 2 – 3 degree temperature increase just wasn't going to be enough to justify the kind of emission reductions the greens want. And one of the largest factors in whole climate story is whether we can determine if the warming of the last 150 years (about 0.8 degrees C) is out of the long-term historical range, which would lend powerful confirmation to the computer climate models that spit out projections that higher levels of greenhouse gases in the atmosphere will lead to unprecedented and potentially dangerous temperature increases in the decades to come. It has long been thought that over the last thousand years the earth has experienced two significant natural climate cycles: the "medieval warm period" (MWP) around the year 1000, and the "little ice age" (LIA) from about 1500 to 1850 or so. The first report of the IPCC in 1992 displayed a stylized thousand-year temperature record showing the MWP warmer than current global temperatures, but this was mostly conjecture. Yet it was a huge problem for the climate campaigners: if the medieval warm period was as warm as today, as some scientists believe, it would mean that today's temperatures are arguably within the range of normal climate variability, and that we could not yet confirm recent greenhouse gas emissions as the sole cause or rely on computer climate models for future predictions of climate apocalypse. There had long been hearsay rumors that leading figures in the climate community said that "we need to make the medieval warm period go away," but there was no evidence until now that scientists might be cooking the books. Moreover, what caused these two climate anomalies anyway? If we could better understand the dimensions and

causes of those two episodes, it would go a long way toward understanding climate forces today and improve the accuracy of our predictions.

The evidence for the MWP and LIA was mostly anecdotal, since there were no thermometers in the year 1000. Is there a way we could determine what the temperature was a thousand years ago? Calculating the average temperature for the entire planet is no simple matter, even today, let alone a thousand years ago. This is where the paleoclimatologists at the CRU enter the picture. The CRU circle set out to "reconstruct" past temperature history through the use of "proxies," such as tree rings, ice core samples, lake sediment samples, and corals from the ocean. Using a variety of ingenious techniques, it is possible for each of these proxies to yield a temperature estimate at each location. Tree rings are thought to be the best proxy, because we can count backward and establish the exact year each ring formed, and by its width make temperature estimates. But tree ring data is very limited. There are only a few kinds of trees that go back a thousand years or more, mostly bristlecone pines in the western U.S. and a few species in Siberia. (There is a whole subfield of paleoclimatology just for this question: dendrochronology.) The thousands of data points that emerge from these painstaking efforts are not selfexplanatory. They need to be adjusted and calibrated for latitude, altitude, and a number of other geographic and exogenous factors (such as volcanic activity and rainfall during the period). Even the most rigorous statistical methodology will generate estimates with large margins of error. One of the features of the CRU emails is how much time the CRU circle spent discussing with each other the myriad problems with processing the data and how to display it to a wider world. One thing that emerges from the e-mails is that the climate modeling community doesn't have high regard for paleoclimatology, and the paleos have a palpable inferiority complex. By the length of many of the e-mail chains kvetching about their problems it is a wonder this small group had time to do any actual research.

In 1999 three American scientists, Michael Mann, Malcolm Hughes, and Raymond Bradley, unveiled in *Nature* magazine what was regarded as a breakthrough—the now notorious "hockey stick" temperature reconstruction which purported to prove that current global temperatures were the highest in the last thousand by a large margin—far outside the range of natural variability. The medieval warm period and the little ice age both disappeared, and the chart was used prominently in the 2001 IPCC report as the "smoking gun" of human-caused climate change. Mann and his co-authors concluded that "the 1990s are likely the warmest decade, and 1998 the warmest year, in at least a millennium."

Case closed? Hardly. The CRU e-mails reveal internal doubts about this entire enterprise before and after the hockey stock made its debut. In a 1996 e-mail to a large number of scientists in the CRU circle, Tom Wigley, a top British climatologist working at the National Center for Atmospheric Research in the U.S., cautioned: "I support the continued collection of such data, but I am disturbed by how some people in the paleo community try to oversell their product." Mann and his colleagues made heavy use of the CRU paleoclimate temperature data, but some of the CRU scientists weren't comfortable with the way Mann represented it, and also seemed to find Mann more than a bit insufferable. CRU scientist Keith Briffa, whose work on tree rings in Siberia has been subject of its own controversies, e-

mailed Edward Cook, a dendrochronologist at Columbia University: "Can I just say that I am not in the MBH [Mann, Bradley, Hughes] camp - if that be characterized by an unshakable 'belief' one way or the other, regarding the absolute magnitude of the global MWP." Briffa had previously expressed dismay to Cook and others about Mann's overstating his case: "I am sick to death of Mann stating his reconstruction represents the tropical area just because it contains a few (poorly temperature representative) tropical series," adding that he was tired of "the increasing trend of self-opinionated verbage [Mann] has produced over the last few years... and (better say no more)." Cook replied: "I agree with you. We both know the probable flaws in Mike's recon, particularly as it relates to the tropical stuff. Your response is also why I chose not to read the published version of his letter. It would be too aggravating... It is puzzling to me that a guy as bright as Mike would be so unwilling to evaluate his own work a bit more objectively." In yet another revealing e-mail, Cook told Briffa: "Of course he [Bradley] and other members of the MBH camp have a fundamental dislike for the very concept of the MWP, so I tend to view their evaluations as starting out from a somewhat biased perspective, i.e. the cup I not only 'half-empty'; it is demonstrably 'broken'. I come more from the 'cup halffull' camp when it comes to the MWP, maybe yes, maybe no, but it is too early to say what it is." In another e-mail to Briffa, Cook complains about Bradley, too: "his air of papal infallibility is really quite nauseating at times."

As the IPCC was lapping up Mann's hockey stick with enthusiasm even though there were doubts among Mann's colleagues about its uncertainties, Briffa sent Mann a note of caution: "My concern was motivated by the possibility of expressing an impression of more consensus than might actually exist. I suppose the earlier talk implying that we should not 'muddy the waters' by including contradictory evidence worried me. IPCC is supposed to represent consensus but also areas of uncertainty in the evidence." Briffa also wrote to Mann and Jones in 1999: "I believe that the recent warmth was probably matched about 1000 years ago." Even Malcolm Bradley, one of the original hockey stick co-authors, expressed reservations about over-reliance on their invention, writing to Cook, Mann and others in 2002: "All of our attempts, so far, to estimate hemisphere-scale temperatures for the period around 1000 years ago are based on far fewer data than any of us would like. None of the datasets used so far has anything like the geographical distribution that experience with recent centuries indicates we need, and no one has yet found a convincing way of validating the lower-frequency components of them against independent data. As Ed wrote, in the tree-ring records that form the backbone of most of the published estimates, the problem of poor replication near the beginnings of records is particularly acute, and ubiquitous... Therefore, I accept that everything we are doing is preliminary, and should be treated with considerable caution."

Mann didn't react well to these hesitations from his colleagues, and apparently has a way of rubbing his colleagues the wrong way. Bradley felt compelled to send a message to Briffa after one of Mann's self-serving e-mails with the single line: "Excuse me while I puke." One extended thread grew increasingly acrimonious as Mann lashed out at his colleagues. Mann wrote to Briffa, Jones, and seven others over their favorable remarks about a *Science* magazine article that

reached different conclusions about the temperature record: "Sadly, your piece on the Esper at al paper is more flawed than even the paper itself...You three all should have known better... there is a lot of damage control that needs to be done and, in my opinion, you've done a disservice to the honest discussions we had all had in the past, because you've misrepresented the evidence." To Briffa in particular Mann wrote: Hopefully, you know that I respect you quite a bit as a scientist! But in this case, I think you were sloppy. And the sloppiness had a real cost..." Mann's bad manners prompted Bradley to reply: "I wish to disassociate myself with Mike's comments, or at least the tone of them. I do not consider myself the final arbiter of what Science should publish, nor do I consider what you did to signify the end of civilization as we know it." Tempers got so out of hand that Tom Crowley of Duke University intervened: "I am concerned about the stressed tone of some of the words being circulated lately... I think you are all fine fellows and very good scientists and that it is time to smoke the peace pipe on all this and put a temporary moratorium on more email messages until tempers cool down a bit." Mann responded with his best imitation of Don Corleone: "This is ultimately about the science, its not personal." If the CRU circle treat each other this way, it is no wonder they treat skeptics even more rudely.

One of Briffa's concerns about Mann's hockey stick is that some of the tree ring data—Briffa's specialty—didn't match up well with other records, so Mann either omitted it (in some versions of the hockey stick) or changed its statistical weighting in his overall synthesis to downplay the anomalous results of the raw data. (This is the origin of Jones's "hide the decline" e-mail; after 1960 the tree ring data suggests a decline in temperatures, while other data sets show an increase. Iones's and Mann's treatment may be defensible, but is problematic to say the least.) Starting in 2003 two mild-mannered Canadians, retired engineer Stephen McIntrye and Guelph University economist Ross McKitrick, started making noises about serious problems with the now iconic hockey stick graph. The dispute between McIntyre, McKitrick (M/M as they became known in the shorthand of climate lingo) and the hockey team was highly technical, involving advanced methods of data selection and statistical analysis that are almost impossible for the layperson to follow. But one key point was access to the original raw data and complete computer codes that Mann and CRU had used, rather than the adjusted data reported in their final studies.

To extend the sports tool simile, Mann and the hockey team responded with the scientific equivalent of high-sticking. It was McIntryre's requests for raw data and computer codes that prompted the numerous e-mails from Jones and other CRU people about "hiding" behind technicalities to refuse FOI requests, or even destroying data, codes, and e-mails to stymie McIntyre. Whereas prior to this time most of the complaints about skeptics in the e-mails dealt with Pat Michaels, Fred Singer, Richard Lindzen, and journal editors who didn't toe the line, after 2003 the CRU crew became obsessed with McIntyre above all others. He appears in 105 of the e-mails by name (in some others, he's referred to as "a certain Canadian"), usually with a tone of resentment and contempt. McIntyre's real sin is that he isn't a bona fide member of The Cool Kids Climate Club, with peer-reviewed articles in

journals the hockey team firmly controlled. But he had a serious track record for spotting statistical funny business. McIntyre was involved in exposing the Bre-X fraud in Canada several years ago (Bre-X was a gold mining company promising fat profits on a new proprietary technology for ore deposits in Borneo; McIntrye smelled a rat and demanded the raw data. Bre-X collapsed shortly after), and McIntyre scored a major hit against NASA's chief climate alarmist James Hansen, discovering significant errors in Hansen's temperature reconstruction of the 20th century that overestimated temperatures. (NASA's Goddard Institute website publicly thanked McIntyre, no doubt through gritted cyber teeth, for pointing out their error.) The hockey team's obsession with McIntyre seems badly out of proportion if there was nothing amiss in their work; think of Ben Bernanke losing sleep over Ron Paul.

McIntvre and McKitrick may have made mistakes in their analysis of the hockey stick—the charges and counter charges are difficult for non-specialists to sort out—but they were sufficiently persuasive that the National Academy of Sciences appointed an expert review panel to look into the dispute. The NAS reported its findings in 2006, and was sufficiently hedged in diplomatic equivocations that Mann and the media claimed the hockey stick had been vindicated. But a close reading devastated the hockey stick. While the NAS said the hockey stick reconstruction was "plausible" for 20th century warming, the report went on to state clearly that "substantial uncertainties currently present in the quantitative assessment of large-scale surface temperature changes prior to about A.D. 1600 lower our confidence in this conclusion compared to the high level of confidence we place in the Little Ice Age cooling and 20th century warming. Even less confidence can be placed in the original conclusions by Mann et al. (1999) that "the 1990s are likely the warmest decade, and 1998 the warmest year, in at least a *millennium.*" (Emphasis added.) One of the NAS committee members, physicist Kurt Cuffey of the University of California, was more direct in remarks to Science magazine: "The IPCC used [the hockey stick] as a visual prominently in the [2001] report. I think that sent a very misleading message about how resolved this part of the scientific research was." Mann's hockey stick, a centerpiece of the 2001 IPCC report, did not appear in the 2007 IPCC report.

The NAS report, it should be added, included an implicit rebuke of Mann and his colleagues for their reluctance to share their data with other researchers: "The committee recognizes that access to research data is a complicated, discipline-dependent issue, and that access to computer models and methods is especially challenging because intellectual property rights must be considered. Our view is that all research benefits from full and open access to published datasets and that a clear explanation of analytical methods is mandatory. Peers should have access to the information needed to reproduce published results, so that increased confidence in the outcome of the study can be generated inside and outside the scientific community."

Despite this criticism and rebuke from the NAS, the CRU hockey team continued refusing right up to this month to share its raw data and computer codes with McIntrye or anyone else. Mann continued to insist that the MWP was overestimated, and he keeps on producing more new hockey sticks than the NHL

(he had a new one in *Science* magazine the same week Climategate broke). Some of the egregious e-mails in the stash include suggestions that everyone delete e-mails related to their work on the IPCC process to shield them from FOI requests (possibly illegal) and, according to one of Jones's e-mails, destroying the raw data itself in the face of a successful FOI requisition. Jones writes in one 2005 message: "If they ever hear there is a Freedom of Information Act now in the UK, I think I'll delete the file rather than send to anyone." Jones now claims no e-mails were deleted, but he'll need to explain his December 12, 2008 message to Ben Santer about a new FOI request from McIntyre: "I am supposed to go through my e-mails and he can get anything I've written about him. About 2 months ago I deleted loads of emails, so have very little—if anything at all."

The most devastating document in the CRUtape letters may not be any of the egregious e-mails that drew most of the public and blogosphere attention, but the detailed notes of a young computer programmer, Ian Harris, assigned the task of sorting out the handling of the raw data and computer files. The HARRY_READ_ME.txt file, over 100,000 words long, paints a picture of haphazard data handling that would get almost any private sector researcher fired. Among the many damning items included in "Harry's" narrative are more instances of "hiding the decline" such as "Specify period over which to compute the regressions (stop in 1940 to avoid the decline)" and "Apply a VERY ARTIFICAL correction for decline!" Worse are Harry's notes of improperly coded data (or data without codes at all). computer subroutines that don't work, and near complete chaos: "I am very sorry to report that the rest of the databases seem to be in nearly as poor a state as Australia was... Aarrggghhh! There truly is no end in sight...am I the first person to attempt to get the CRU databases in working order?!! . . . I am seriously worried that our flagship gridded data product is produced by Delaunay triangulation - apparently linear as well. As far as I can see, this renders the station counts totally meaningless. It also means that we cannot say exactly how the gridded data is arrived at from a statistical perspective - since we're using an off-the-shelf product that isn't documented sufficiently to say that. Why this wasn't coded up in Fortran I don't know - time pressures perhaps? Was too much effort expended on homogenisation. that there wasn't enough time to write a gridding procedure? Of course, it's too late for me to fix it too..." On and on goes Harry's catalogue of software bugs and data horrors. Finally, this: "OH F--- THIS. It's Sunday evening, I've worked all weekend, and just when I thought it was done I'm hitting yet another problem that's based on the hopeless state of our databases. There is no uniform data integrity, it's just a catalogue of issues that continues to grow as they're found."

No drug company could get through the FDA approval process with data handling this inadequate, yet the climate policy process contemplates trillions of dollars in commitments based partially on this incompetent work. Worse, it suggests the possibility that the CRU circle might not be able replicate their own findings from scratch, let alone outside reviewers. No wonder Mann keeps issuing new versions of his stick figure. But the frustration of the hapless Harry raises a more fundamental problem, namely, that the extreme politicization of climate science this episode reveals will discourage the best graduate students from entering the field. Prof. Judith Curry of Georgia State University—head of the School

of Earth and Atmospheric Sciences at Georgia Tech and not a climate skeptic by any stretch—passed along a letter she received from a graduate student pondering whether to enter the field of climate science: "I am a young climate researcher (just received my master's degree from xxx University) and have been very troubled by the emails that were released from CRU. I just want to applaud and support your response on climateaudit.org (95% of it:)). Your statement represents exactly how I have felt as I slowly enter this community. The content of some of the emails literally made me stop and wonder if I should continue with my PhD applications for fall 2010, in this science." Scientists at top universities have been telling me privately for several years now that the best graduate students in science are avoiding climatology because they dislike how politicized it has become and consider it a dead-end career field. I'm sure Harry of HARRY_READ_ME.txt probably wishes he'd chosen a different field. But this means many students who take up the field are second-raters or do so out of ideological motivation, which guarantees that the CRU scandal won't be the last.

The CRU scandal is only the tip of an un-melted iceberg of politicized science, and it raises questions about the politicization of the "hard" sciences, which have been generally thought immune to leftist bias and political correctness of the universities. Some scientists are quite open about their leftward orientation. In 2004, Harvard geneticist Richard Lewontin wrote in the New York Review of Books: "Most scientists are, at a minimum, liberals, although it is by no means obvious why this should be so. Despite the fact that all of the molecular biologists of my acquaintance are shareholders in or advisers to biotechnology firms, the chief political controversy in the scientific community seems to be whether it is wise to vote for Ralph Nader this time." MIT's Kerry Emanuel, as "mainstream" as they come in climate science (Gore referenced his work, and in one of his books Emanuel refers to Sen. James Inhofe as a "scientific illiterate" and climate skeptics as les refusards), but offers this warning to his field: "Scientists are most effective when they provide sound, impartial advice, but their reputation for impartiality is severely compromised by the shocking lack of political diversity among American academics, who suffer from the kind of group-think that develops in cloistered cultures. Until this profound and well-documented intellectual homogeneity changes, scientists will be suspected of constituting a leftist think tank." Perhaps the most damning email from the CRU circle is this message from Phil Jones to John Christy (July 2005): "As you know, I'm not political. If anything, I would like to see the climate change happen, so the science could be proved right, regardless of the consequences. This isn't being political, it is being selfish." Jones's attitude may not be exactly political, but it is certainly unscientific. The denial of political bent is also hard to square with the e-mails revealing that several of these scientists worked closely with the most alarmist advocacy groups such as Greenpeace, which really deserves to be regarded as the John Birch Society of the environmental movement.

The body blows to the climate campaign did not end with the Climategate emails. The IPCC has issued several embarrassing retractions from its 2007 fourth assessment report, starting with the claim that Himalayan glaciers were in danger of melting as soon as 2035. That such an outlandish claim would be so readily

accepted is a sign of the credulity of climate campaign and the media: even if extreme global warming occurs over the next century, the one genuine scientific study available estimated the huge ice fields of the Himalayas would take more than 300 years to melt—a prediction a beginning chemistry student could make with a calculator. (The actual evidence is mixed: some Himalayan glaciers are currently expanding.) The source for the melt-by-2035 claim turned out to be not a peerreviewed scientific assessment, but a report from an advocacy group (the World Wildlife Fund) which in turn lifted the figure from popular magazine article in India whose author later disayowed his offhand speculation. But what made this first retraction noteworthy was the way in which it underscored the thuggishness of the climate establishment. The IPCC's chairman, Rajendra Pachauri (an economist and former railroad engineer who is routinely described as a "climate scientist"). initially said that critics of the Himalayan glacier melt prediction were engaging in "voodoo science," though it later turned out that Pachauri had been informed of the error in early December—in advance of the Copenhagen conference—but failed to disclose it. He's invoking the Charlie Rangel defense: it was my staff's fault.

The Himalayan retraction touched off a cascade of further retractions and corrections, though the IPCC and other organs of climate alarmism are issuing their corrections sotto voce, hoping the media won't take notice. The IPCC's assessment that 40 percent of the Amazonian rain forest was at risk of destruction from climate change was also revealed to be without scientific foundation; the WFF was again the source. The London Telegraph identified 20 more claims of ruin in the IPCC's 2007 report that are based on reports from advocacy groups such as the WWF and Greenpeace rather than peer-reviewed research, including claims that African agricultural production would be cut in half, estimates of coral reef degradation, and the scale of glacier melt in the Alps and the Andes. Numerous other claims were sourced to unpublished student papers and dissertations, or to misstated or distorted research. Peer reviewers in the formal IPCC process had flagged many of these errors and distortions during the writing of the 2007 report, but were ignored. For example, the IPCC claimed that the world was experiencing rapidly rising costs due to extreme weather related events brought on by climate change. But the underlying paper, when finally published in 2008, expressly contradicted this, saying "We find insufficient evidence to claim a statistical relationship between global temperature increase and catastrophe losses." Perhaps the most embarrassing walkback was the claim that 55 percent of the Netherlands was below sea level, and therefore gravely threatened by rising sea levels. The correct number is 26 percent, which Dutch scientists say they tried to tell the IPCC before the 2007 report, to no avail. And in any case, a paper published last year in *NatureGeoscience* predicting a 21st century sea level rise of up to 82 centimeters has been withdrawn, with the authors acknowledging mistaken methodology and admitting "we can no longer draw firm conclusions regarding 21st century sea level rise from this study without further work." (Other published studies predict up to a six-foot rise in sea levels, but share many of the same flaws as the retracted *NatureGeoscience* study. The IPCC ignored several published studies casting doubt on its sea level rise estimates.)

The IPCC isn't the only important node of the climate campaign having its

reputation run through the shredder. The 2006 Stern Review, a British report on the economics of climate change named for its lead author, Lord Nicholas Stern, was revealed to have quietly watered down some of its headline-grabbing claims in its final published report because, as the *Daily Telegraph* put it, "the scientific evidence on which they were based could not be verified." Like rats deserting a sinking ship, scientists and economists cited in the Stern Review have disayowed Stern's misuse of their work. Last week the World Meteorological Association pulled the rug out from under one of Gore's favorite talking points—that climate change will mean more tropical storms. A new study by the top scientists in the field concluded that although warmer oceans might make for stronger tropical storms in the future. there has been no climate-related trend in tropical storm activity over recent decades and, further, that there will likely be significantly fewer tropical storms in a warmer world. "We have come to substantially different conclusions from the IPCC," said lead author Chris Landsea, a scientist at the National Hurricane Center in Florida. (Landsea, who does not consider himself a climate skeptic, resigned from the IPCC in 2005 on account of its increasingly blatant politicization.)

It was a thorough debunking, as Roger Pielke Jr's invaluable blog noted in highlighting key findings in the study: "What about more intense rainfall? '[A] detectable change in tropical-cyclone-related rainfall has not been established by existing studies.' What about changes in location of storm formation, storm motion, lifetime and surge? 'There is no conclusive evidence that any observed changes in tropical cyclone genesis, tracks, duration and surge flooding exceed the variability expected from natural causes.' Bottom line? '[W]e cannot at this time conclusively identify anthropogenic signals in past tropical cyclone data.'" (When Pielke pointed out defects in the purported global-warming/tropical storm link in a 2005 edition of the *Bulletin of the American Meteorological Society*, the lead author of the IPCC's work on tropical storms, Kevin Trenberth, called the article "shameful," said it should be "withdrawn," but in typical fashion refused to debate Pielke about the substance of the article.)

Before Climategate, expressing skepticism about catastrophic global warming typically got the hefty IPCC report thrown in your face along with the mantra about "2,500 of the world's top scientists all agree." Now the IPCC is being disavowed like a Mission Impossible team with a blown cover. Last spring, Senate Environment and Public Works chair Barbara Boxer insisted that she relied solely on U.S. scientific research, and not the IPCC, to support the EPA's greenhouse gas "endangerment finding." In her opening statement at a hearing, Boxer said "I didn't quote one international scientist or IPCC report... We are quoting the American scientific community here." The UN has announced that it will launch an "independent review" of the IPCC, though like the British investigation of East Anglia University's CRU, the UN review will probably be staffed by "settled science" camp followers that will obligingly produce a whitewash. But Pachauri's days as IPCC chairman are likely numbered; there are mounting calls from within the IPCC for Pachauri to resign, amid charges of potential conflicts of interest (like Gore, Pachauri is closely involved with energy schemes that benefit from greenhouse gas regulation) but also in part because Pachauri chose this delicate moment to publish

a soft-core pornographic novel. (The main character is an aging environmentalist and engineer engaged in a "spiritual journey" that includes meeting Shirley MacLaine, detailed explorations of the Kama Sutra, and group sex.) Robert Watson, Pachauri's predecessor as chairman of the IPCC from 1997 to 2002, told the BBC: "In my opinion, Dr. Pachauri has to ask himself, is he is still credible, and the governments of the world have to ask themselves, is he still credible." Not the most ringing endorsement. Yvo de Boer, the head of the UN's Framework Convention on Climate Change (the diplomatic format that produced the Kyoto Protocol and the Copenhagen circus), announced his surprise resignation on February 18. De Boer will join the private sector after years of trafficking in climate Gore that warming is the greatest threat humanity has ever faced.

The reaction of the climate campaign reveals a movement unable to hide its decline. Skeptics and critics of climate alarmism have been called "deniers," usually with the explicit comparison to Holocaust deniers, but the denier label now more accurately fits the climate campaigners. The first line of defense is that the acknowledged errors only amount to a few isolated and inconsequential points in the report of the IPCC's Working Group II, which studies the *effects* of global warming, and not the more important report of the IPCC's Working Group I, which is about the science of global warming. Working Group I is where the real action is, as it deals with the computer models and temperature data on which the "consensus" conclusion is based that the Earth has warmed by about 0.8 degrees Celsius over the last century and a half, than human-generated greenhouse gases are overwhelmingly responsible for this rise, and that we may expect up to 4 degrees Celsius of further warming if greenhouse gas emissions aren't stopped by midcentury. As Gore put it in his *Times* article last Sunday, "the overwhelming consensus on global warming remains unchanged."

This central pillar of the climate campaign is unlikely to survive much longer, and each repetition of the "science-is-settled" mantra inflicts more damage to the climate science community. The scientist at the center of the Climategate scandal at East Anglia University, Phil ("hide the decline") Jones dealt the science-is-settled narrative a huge blow with his candid admission in an interview with the BCC that his surface temperature data are in such disarray that they probably cannot be verified or replicated; that the medieval warm period may have been as warm as today, and that he agrees that there has been no statistically significant global warming for the last 15 years—all three points that climate campaigners have been bitterly contesting. And Jones specifically disavowed the "science-is-settled" slogan:

BBC: When scientists say "the debate on climate change is over," what exactly do they mean, and what don't they mean?

Jones: It would be supposition on my behalf to know whether all scientists who say the debate is over are saying that for the same reason. *I don't believe the vast majority of climate scientists think this.* This is not my view. There is still much that needs to be undertaken to reduce uncertainties, not just for the future, but for the instrumental

(and especially the palaeoclimatic) past as well [emphasis added].

Georgia Tech's Judith Curry wrote: "No one really believes that the 'science is settled or that 'the debate is over.' Scientists and others that say this seem to want to advance a particular agenda. There is nothing more detrimental to public trust than such statements."

Indeed, the next wave of climate revisionism is likely to reopen most of the central questions of "settled science" in the IPCC's Working Group I, starting with the data purporting to prove how much the Earth has warmed over the last century. A London *Times* headline last month summarizes the shocking revision currently underway: "World May Not Be Warming, Scientists Say." The Climategate e-mails and documents revealed the disarray in the surface temperature records the IPCC relies upon to validate its claim of 0.8 degrees Celsius of human caused warming. prompting a flood of renewed focus on the veracity and handling of surface temperature data. Skeptics such as Anthony Watts, Joseph D'Aleo, and Stephen Macintyre have been pointing out the defects in the surface temperature record for years, but the media and the IPCC have ignored them. Watts and D'Aleo have painstakingly documented (and in many cases photographed) the huge number of temperature stations that have been relocated, corrupted by the "urban heat island effect," placed too close to heat sources such as air conditioning compressors, airports, buildings, or paved surfaces, as well as surface temperature series that are conveniently left out of the IPCC reconstructions that show the temperature rise. The compilation and statistical treatment of global temperature records is hugely complex, but the skeptics such as Watts and D'Aleo offer compelling critiques showing that most of the reported warming disappears if different sets of temperature records are included, or if compromised station records are excluded.

Eventually the climate modeling community is going to have to come to grips with reconsidering the central question of whether the models the IPCC uses for its predictions of catastrophic warming have overestimated the climate's sensitivity to greenhouse gases. Two recently published studies funded by the U.S. Department of Energy, one by Brookhaven Lab scientist Stephen Schwartz in the *Journal of Geophysical Research*, and one by MIT's Richard Lindzen and Yong-Sang Choi in *Geophysical Research Letters*, both argue for vastly lower climate sensitivity to greenhouse gases. The models the IPCC uses for projecting a 3 to 4 degree Celsius increase in temperature all assume large positive (that is, temperature magnifying) feedbacks from a doubling of CO_2 in the atmosphere; Schwartz, Lindzen, and Choi discern strong negative (or temperature-reducing) feedbacks in the climate system, suggesting an upper-bound of future temperature rise of no more than 2 degrees Celsius.

If the climate system is less sensitive to greenhouse gases than the climate campaign believes, then what is causing the plainly observable changes in the climate such as earlier arriving springs, receding glaciers and shrinking Arctic Ocean ice caps? There have been alternative explanations in the scientific literature for several years, ignored by the media and the IPCC alike. The IPCC downplays theories of variations in solar activity, such as sunspot activity and gamma ray bursts, and although there is robust scientific literature on the issue, even the

skeptic community is divided about whether solar activity is a primary cause of recent climate variation. Several studies of Arctic warming conclude that changes in ocean currents, cloud formation, and wind patterns in the upper atmosphere explain the retreat of glaciers and sea ice better than greenhouse gases. Another factor in Arctic is "black carbon"—essentially fine soot particles from coal-fired power plants and forest fires, imperceptible to the naked eye but reducing the albedo (solar reflectivity) of Arctic ice masses sufficient to cause increased summertime ice melt. Above all, if the medieval warm period was indeed as warm or warmer than today, we cannot rule out that the changes of recent decades are not part of a natural rebound from the "little ice age" that followed the medieval warm period and ended in the 19th century. Skeptics have known and tried to publicize all of these contrarian or confounding scientific findings, but the compliant news media routinely ignored all of them, enabling the IPCC to get away with its serial exaggeration and blatant advocacy for more than a decade.

The question going forward is whether the IPCC will allow contrarian scientists and confounding scientific research into its process, and include the opportunity for dissenting scientists to publish a minority report. Last March, John Christy sent a proposal to the 140 lead authors of IPCC Working Group I asking "that the IPCC allow for well-credentialed climate scientists to craft a chapter on an alternative view presenting evidence for low climate sensitivity to greenhouse gases than has been the IPCC's recent message—all based on published information... An alternative view is necessary, one that is not censored for the so-called purpose of consensus. This will present to our policymakers an honest picture of scientific discourse and process." Christy received no response. In the aftermath of Climategate, Christy proposed in *Nature* magazine that the IPCC move to a Wikipedia-style format, in which lead authors would mediate an ongoing discussion among scientists, with the caveat that all claims would need to be based on original studies and data. Such a process would produce more timely and digestible information than the huge twice-a-decade reports the IPCC now produces. No response.

The second aspect of the climate story is the "prolonged and solemn farce" (to borrow Churchill's phrase about disarmament talks in the 1930s) of the UN Kyoto Protocol process and the Copenhagen Collapse. The entire UN edifice was built upon two previous models of global action, namely, trade liberalization under GATT and later the WTO, and the Montreal Protocol of 1987 that phased out chlorofluorocarbons (CFCs). Like free trade liberalization agreements, the Kyoto Protocol was based on the idea that rich nations were better able to go first in reducing trade barriers and CFC emissions. But in the case of trade, lowering trade barriers would make all nations richer almost immediately, while in the case of CFCs reasonably priced substitutes were ready to bring to the global market at sufficient scale. Neither of these important economic conditions are true of climate change

and the problem of reducing greenhouse gas (GHG) emissions; hence the stalemate between wealthy nations that accepted emission reductions targets in Kyoto and rapidly developing nations (especially India, China, and Brazil) that resist making commitments to reduce GHG emissions in the successor agreement that was supposed to be reached in Copenhagen.

Developing nations such as India, where more than 500 million people lack access to electricity and still live in dire poverty, make the sensible calculation that the tradeoffs (including the full spectrum of environmental tradeoffs) of continued economic growth outweigh the risks of climate change, or at the very least demand that wealthy nations pay enormous capital costs for developing nations to adopt low-carbon energy sources at sufficient scale. Under current and forecast budget scenarios for OECD nations, this is simply not going to happen. Energy has rightly been called the master resource, because it is fundamental to everything else in the economy. There is a robust correlation on the global level between energy consumption and human well being, and the key is cheap energy. There are no examples of a nation that grew wealthy on expensive energy. Not a single wealthy nation currently forecasts adopting low-carbon energy sources in the next 20 years that is on a scale sufficient to match the rising energy demands of developing nations during that same period. If wealthy nations are not willing or able to adopt low-carbon energy on a sufficient scale, how are developing nations supposed to do so?

This leads to two grim paradoxes for global climate policy. The first is that wealthy nations cannot alone achieve the targets climate orthodoxy now say is required to avoid dangerous climate change. Even if the U.S. and other industrialized nations somehow achieved at great expense the 80 percent GHG emissions reduction target now called for by climate orthodoxy to stabilize CO₂ concentrations at 450 ppm by the year 2050, it would have virtually no climate benefit. As the International Energy Agency (IEA) concluded, "the OECD countries alone cannot put the world onto the path to 450-ppm trajectory, even if they were to reduce their emissions to zero" (emphasis added). In other words, even if the 30 nations of the OECD disappeared from the planet, rising emissions from developing nations will carry us well past the 450 ppm target. Incidentally, the IEA casts doubt on whether the emissions reduction targets can be met at any price, writing in 2008 that "Even leaving aside any debate about the political feasibility of the 450 Policy Scenario, it is uncertain whether the scale of the transformation envisaged is even technically achievable, as the scenario assumes broad deployment of technologies that have not yet been proven. The technology shift, if achievable, would certainly be unprecedented in scale and speed of deployment."2

But second, even if wealthy nations did somehow manage to wean themselves rapidly off fossil fuels, it would ironically make fossil fuels more attractive to developing nations. Roughly 80 percent of the world's hydrocarbon fuels are located in non-OECD nations. If the wealthy nations decide to eschew fossil fuels, they will become even cheaper for developing nations to use. No wonder

-

² http://www.worldenergyoutlook.org/docs/weo2008/WEO2008_es_english.pdf, p. 14.

China and India are cheering us on while steadfastly refusing to accept emissions limits for themselves.

The Indians, Chinese, Brazilians and other developing nations were willing to play along with the charade up to a point, providing the U.S. and European nations were willing to cough up billions of dollars in annual wealth transfers as compensation for suppressing the growth of fossil fuel energy in developing countries. But these transfers were simply a non-starter in the current fiscal circumstances of the United States and Europe, so when wealthy nations resisted making firm commitments to billions in aid, the developing nations dug in their heels, resulting in a collapse of the entire edifice at Copenhagen. The "agreement" that Obama brokered at the last minute is a non-binding pale shadow of what was intended—basically an agreement to be good and keep meeting over and over again to talk and talk some more.

The failure in Copenhagen led to the third act of the climate farce, the collapse of cap and trade legislation in Congress just two months ago. And this part of the story comes in two scenes—the details of the policy, and the remarkably clarifying politics of the matter.

There's a lot to say about the entire subject of emissions trading, but I want to focus in on just one aspect that seems to be little remarked upon—the comparison of emissions trading for sulfur dioxide, which we have done since the 1990 Clean Air Act, and proposed trading for carbon dioxide. The comparison between cap and trade for sulfur dioxide and proposed cap and trade for carbon dioxide is superficial and simplistic. Just because both compounds end in "dioxide" does not mean the same policy would operate the same way (a point a number of economists who helped design SO₂ emissions trading have made.) Trading in SO₂ involved no constraint on fossil fuel combustion; to the contrary, since 1980 we have doubled the amount of coal burned in the U.S. while reducing SO₂ emissions by nearly 66 percent. Of course, one of the reasons for this was fuel substitution: a lot of power plants switched to low-sulfur coal. But there is no such thing as lowcarbon coal. Reducing CO₂ emissions from coal can only be done by burning less coal, which is why the SO₂-CO₂ comparison is apples-and-oranges. (Yes, we can get a major cut by switching from coal to natural gas, but do the math; by 2050 you have to phase out virtually all natural gas too, so the advantage is only temporary.) The CO₂ equivalent of the other half of the SO₂ story (scrubbers) is carbon sequestration, which I'll simply say is the Brooklyn Bridge of climate policy make-believe.

By the way, the SO_2 — CO_2 comparison that is the favorite superficial environmentalist talking point is belied by one simple fact: the ridiculous length of the Waxman-Markey bill, which, at 1,500 pages, requiring the direct involvement of more than a dozen federal agencies to administer (versus three for SO_2 trading), is in stark contrast to the short SO_2 emissions trading title of the 1990 Clean Air Act (and which most environmental organizations ironically opposed at the time). The

entire CAA of 1990, covering multiple pollutants, was much shorter than Waxman-Markey.

To the prospect that a carbon cap imposed on U.S. energy use would drive jobs overseas, the climate campaigners have a ready answer: "Border adjustments." "Border adjustments" if of course just a nice euphemism for trade protectionism, a horrible idea I had thought was discredited for good, but I guess we should never underestimate the talents of the greens to embrace destructive anachronisms. Even if the "border adjustment" mechanisms were to survive a legal challenge before the World Trade Organization (which many trade lawyers doubt—one more reason why environmentalists despise the WTO), to think that our trading partners among developing nations will sit still for this is not just naïve—it is childlike in its unseriousness. I can see the Chinese or Indian finance ministers now: "Nice trade deficit (or Treasury bond sale) you Yanks have there. Shame if anything happened to it." To pick just one detail: are we going to impose the border adjustments uniformly on every product from nations that do not submit to our dictates on their energy policies, such as on all the Chinese and Indian and Brazilian-made components of our windmills and solar panels that GE and others import from those countries now (our current trade deficit in wind power alone is over \$20 billion [http://www.aei.org/speech/100086], a number that will grow as we try to scale up), which would be an obvious cock-up on the main objective.³ If not, are we then going to hire still more trade bureaucrats to make the exceptions, thereby creating more opportunities for multinational corporations to game the system? Even Al Gore once understood why this is a bad idea.

In the end the cap and trade program could not survive its own contradictions. It seeks to make carbon energy more expensive but does not ask consumers to pay higher energy prices. It seeks a first in economic history: rationing without scarcity or price inflation. The prospect of Wall Street creating carbon-backed derivative securities to trade didn't go down well with a political system still digesting the problems of government-sponsored mortgage-backed derivatives. At least mortgages were attached to a tangible if overvalued asset—houses—while carbon credits would be derivatives on an odorless, colorless gas that, unlike a pork belly or a house, can't be delivered to a buyer. Not surprisingly, with the collapse of cap and trade, the Chicago Climate Exchange, the trading venue financiers put together to get in on the ground floor and hopefully corner the government-mandated trading market, is in free fall, laying off more than half its employees in recent weeks, and seeing the value of its carbon credits fall from a high of around \$8 a ton two years ago to about 10 cents a ton right now.

But even more astonishing was the palpable insincerity of the Obama White House, which never made an effort on behalf of climate legislation even a tiny fraction of what they put into the health care bill. Eric Pooley's new book, *The Climate Wars*, reports that from the earliest days of the Obama presidency, White House support for a cap on carbon emissions "has been all talk—and even the talk tends to get watered down." Pooley quotes an unnamed White House insider: "You had this incredible green Cabinet of really committed people, but the only thing that

³ http://www.aei.org/speech/100086.

really matters is what the president says—so everyone was trying to get words into his mouth. And Rahm was trying to keep the words out of his mouth. It was just a chronic pattern of infighting." The greenies in the White House (and Al Gore on the outside) pressed hard for a more serious effort by Obama. "But then there were the Washington operatives on the political and economic teams who did not want to waste a bunch of bullets on some weirdo green crusade when the polling numbers weren't there, and it would be a bloody battle to take that hill. They said, 'Let's go take some other hill."

Pooley adds this additional detail:

When corporate and environmental leaders from the U.S. Climate Action Partnership went to the Roosevelt Room in the West Wing for a late spring 2009 meeting with Emanuel, they could see that *he didn't much care about climate change*. What he cared about was winning—acquiring and maintaining presidential power over an eight-year arc. Climate and energy were agenda items to him, pieces on a legislative chessboard; he was willing to play them only in ways that enhanced Obama's larger objectives. *He saw no point in squandering capital on a lost cause*. (Emphasis added.)

Pooley's bottom line: "The chief of staff was an obstacle to climate action."

So what do environmentalists think of this cynical treatment of their number one priority? Carl Pope, chairman of the Sierra Club, said last week that "Obama is the best environmental president we've had since Teddy Roosevelt." Sounds like he's willing to be battered again before questioning his political betrothal. *Politico.com* noted , "Some say there's little doubt that if a spill like the one in the Gulf took place on former President George W. Bush's watch, environmental groups would have unleashed an unsparing fury on the Republican in the White House. For their liberal ally, Obama, they seem willing to hold their tongues."

Matt Yglesias argued in *The American Prospect* that "a disaster of this magnitude should be a boon to progressives and progressive policy." And yet the best bet in Washington right now is that cap and trade is dead in any form, that the best environmentalists can hope for now is yet another energy bill like every other energy bill going back to Jimmy Carter's first big energy bill in 1978, a bill that, as Kevin Drum rightly observed on *Mother Jones* blog, "accomplishes very little, and accomplishes that little solely by offering up subsidies to every special interest you can imagine." "Yes," Drum adds, "I'm feeling bitter about this at the moment. Anyone have a problem with that?"

And that wasn't the end of the disappointment for the climate campaigners. In late August, the greens were shocked again when the Obama Justice Department took the side of the coal-fired electric utility industry against an environmental

⁴ http://www.politico.com/news/stories/0610/38451.html.

⁵ http://prospect.org/cs/articles?article=how we talk about energy

⁶ http://motherjones.com/kevin-drum/2010/06/rip-climate-legislation.

lawsuit that aims to force utilities to reduce greenhouse gas emissions. As the *New York Times* reported:

"We feel stabbed in the back," [plaintiff's attorney Matt] Pawa said. "This was really a dastardly move by an administration that said it was a friend of the environment. With friends like this, who needs enemies?"

Top attorneys at environmental advocacy groups are buzzing about the brief, sources say. Some feel betrayed by a White House that has generally been more amenable to environmental regulation than its predecessor.

"This reads as if it were cut and pasted from the Bush administration's briefing in *Massachusetts*," said David Bookbinder, who served as the Sierra Club's chief climate counsel until his resignation in May.⁷

Add to this the dog-that-didn't bark in the case of the Administration's recent report, which hadn't passed standard peer review, minimizing damage to the Gulf of Mexico from the recent oil spill. It was apparent that the report was released for political reasons, to try to rescue the Administration from its flat-footedness over the entire episode. The Administration's report came under withering fire from independent researchers. But it has received little withering fire from one notable quarter—environmentalists. Where is the Union of Concerned Scientists calling for DefCon1 about the "politicization of science"? If this report had come from the Bush Administration... but this sentence finishes itself rather too easily.

It's hard not to side with the hardheaded political realism of Rahm Emanuel when you see the willful cluelessness of environmentalists. The entire 20-year old climate campaign to alarm the public and the political system into accepting a "wrenching transformation" (to use Al Gore's words) of our energy supply has to be reckoned the single least successful public persuasion campaign in history. At least a billion dollars has been spent (not counting free media and Hollywood celebrity endorsements) directly trying to push the agenda of carbon constraint over the finish line, and many more billions supporting the scientific establishment that has become an echo chamber for climate doom. Yet all the polls that track the issue with consistent questions year after year (such as Gallup or Pew) show that the needle of public opinion hasn't budged; to the contrary, there is declining public support for the climate agenda according to Gallup and Pew.

The climate campaign likes to blame their lack of progress on the "denialist" camp, which has spent a tiny fraction of the amount of the climate campaign to express its skepticism of climate alarmism. If ever there was a modern David-and-Goliath story, this is it. But blaming the climate skeptics is like blaming beer and

 $^{^7\,}http://www.nytimes.com/gwire/2010/08/25/25greenwire-obama-admin-urges-supreme-court-to-vacate-gree-42072.html.$

ESPN for an abusive husband, rather than facing up to the fact that he's a no-good bum.

The climate campaign still has a dangerous trump card to play—regulating greenhouse gases by means of EPA regulations under the Clean Air Act. But this trump card could easily turn into a joker, because the Clean Air Act framework is highly unsuitable to regulating greenhouse gases for a long list of reasons that are beyond the scope and length of this already too-long paper. But if you look closely, you can see that the EPA itself does not have much enthusiasm for this approach, and I am certain that Congress will not look kindly on the results of an EPA program to regulate greenhouse gases. But in any case, the cumbersome EPA process is far short of what the climate campaign wanted and demanded, and is scant consolation for their frantic twenty-plus year effort.