

Global Warming and the Legacy of Bush and Koizumi

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“Cover me,
Give me shelter from the storm”
Bob Dylan, “Cover Me”

“unless we free ourselves from a dependence on these fossil fuels and chart a new course on energy in this country, we are condemning future generations to global catastrophe.”

US Senator Barack Obama, April 3, 2006

Modern industrial civilization is a story of the oil age and its externalities. This paper focuses on the externality of climate change and how it was dealt with, as politics, by the American and Japanese national leaderships in the 2000s, up to 2007. Their feet were stuck fast in the energy mix and consequences of the oil age, but they neglected to look down, recognize the crisis, and begin pulling themselves and the rest of us free. In consequence, precious years have been wasted. This is nothing short of monumental irresponsibility, because climate change is clearly the largest negative externality of the oil age. Climate change is in fact the most comprehensive and threatening negative externality in human history and requires a commensurate response.

This paper will concern itself less with the technical aspects of climate change than its political economy. I will of course note recent work on climate change and particularly what it implies for Japan. Yet I shall also assume that the reader is already aware of the basic mechanisms through which greenhouse gases drive global warming. In other words, my purpose is not to overload the reader with technical information that can readily be had from elsewhere.

Climate change is humanity’s most pressing problem. Evidence of its effects abound in the natural environment - especially in the polar areas that specialists

study - and it will escalate over the years no matter what emissions cuts we might make. One important question is how much it will escalate. The answer to that question will be determined by what we do from now on. And what we do from now on is shaped by political economy. Political economy is generally an uninspiring story of inertia, of externalities, of free-riding and the other aspects of politics as usual. But in this case we can - indeed we must - write a very different scenario. We have the chance, as well as the moral duty, to be frank, to make the political economy of climate change a story of our collective will to confront and overcome a crisis. And Japan can play a crucial role in writing and realizing that vision. So this paper is part of an effort to depict the scale of the problem as well as outline where Japan could make a major contribution to resolving it. Sadly, the bulk of this paper centres on how Japan, in league with the US Bush regime, thwarted moves towards dealing with climate change.

Over the past few years, the global community has been waking up to the scope and scale of the climate change problem. Climate change was long believed by most people to be an hypothetical, and only potentially catastrophic, problem for future generations. But the vast majority of experts now recognize climate change to be an accelerating and increasingly costly reality in the present as well as a horrendous bequest to future generations, beginning with our own children.

Majority Report: The IPCC

“Fear death by water”

TS Eliot, *The Wasteland* 1922

Look at the evidence. The most authoritative voice on climate change is the Intergovernmental Panel on Climate Change (IPCC). This is a United Nations organization set up in 1988 by the World Meteorological Association and the United National Environmental Programme. Both of these UN agencies sought to construct a specially designated agency to examine the evidence concerning climate change (or, more accurately, “global warming”) and assess its risks, based on the best scientific work available. It is important to note that the IPCC does not do its own research, but rather gathers the best refereed and published scientific work and uses that as the basis for its reports. The IPCC reports do not come out very frequently, as they are

an intense and time-consuming process. The first report was released in 1990, the second in 1995, the third in 2001, and the fourth in 2007. The scale of these undertakings is immense. The 2007 fourth report (referred to as IPCC 4 AR) was released in four stages, including an overview in February, a report on impacts in March, a report on mitigation in May, and a final synthesis report in late November.

The entire process of drafting the fourth report involved the efforts of more than 2500 scientific expert reviewers, over 850 contributing authors, and over 450 lead authors. These specialists came from over 130 different countries, and contributed in their various ways over a period lasting no less than 6 years. In short, the IPCC is truly a global effort, and one based on the best scientific evidence available as of its deadlines for accumulating documentation.

The attentive public was shocked by the contents of the 2007 series of IPCC reports. The initial report, made public on February 2, 2007, declared that the scientific evidence is conclusive that human activity is causing climate change. Moreover, the role of consuming fossil fuels in producing the greenhouse gases (especially carbon dioxide) that drive climate change is also clear. It is also clear that greenhouse gases levels have risen dramatically since the beginning of the industrial revolution in 1750. The atmospheric concentrations of carbon dioxide, methane, and nitrous oxide are now well beyond those recorded in samples dating as far back as 650,000 years ago.

Let me quote directly from a section of the IPCC's "Climate Change 2007: The Physical Science Basis, Summary for Policymakers," released in February of 2007: "Carbon dioxide is the most important anthropogenic greenhouse gas...The global atmospheric concentration of carbon dioxide has increased from a pre-industrial value of about 280 ppm [parts per million] to 379 ppm in 2005. The atmospheric concentration of carbon dioxide in 2005 exceeds by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores. The annual carbon dioxide concentration growth-rate was larger during the last 10 years (1995 2005 average: 1.9 ppm per year), than it has been since the beginning of continuous direct atmospheric measurements (1960 2005 average: 1.4 ppm per year) ...The primary source of the increased atmospheric concentration of carbon dioxide since the pre-industrial period results from fossil fuel use."¹⁾

1) http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf

In short, our emissions through the use of fossil fuels are driving climate change, we have emitted far more greenhouse gases than have been in the terrestrial atmosphere in the past 650,000 years, and our rate of emissions is accelerating.

The report also notes that increasing temperatures, sea levels, extinctions, freak weather phenomena and other effects will worsen over time no matter what we do. Even if we could suddenly stop emitting greenhouse gases, the greenhouse gases that our and our predecessors' activity have released into the atmosphere already will continue influencing the global climate for centuries. From now on, we can only influence the scale of change, not the fact.

But what a scale of change we face. The reports depict scenarios, for this century alone, that include increased average temperatures of between 1.1 degrees Celsius and 6.4 degrees Celsius (again, largely depending on what we collectively do). Among other things, the reports warn that these temperature increases will very likely lead to higher sea levels (between 18 to 59 centimetres), more heat waves and other freak weather, more tropical cyclones and extreme tides. We will also see perhaps a third of terrestrial species rendered extinct over the next 60 to 70 years. Moreover, water scarcity will affect billions of people (especially in Africa and Asia), agricultural production will be severely impaired in India and China, and so on. And if we choose not to act, or respond only with half-measures, the next century will be unimaginably worse. What a legacy we are prepared to leave.

The 2007 report is far more certain of these projections than previous reports were. One major reason is that the amount of high-quality research has mushroomed. Twenty years ago, studies of climate variation and its implications were a comparatively small niche in the academic community. But now this area of research is enormous, as one would expect. The more the research accumulates, the more certain and disturbing the findings are becoming. Moreover, the evidence of climate change, including the increasingly early springs and warmer winters, is so undeniable and so disturbing that it reinforces scientists' intellectual incentives to find out more. Humanity is in fact engaged in an historic and dramatic - and perhaps very tragic - process of self-discovery, as we are learning that we collectively can reshape the world. Columbia University Professor and Director of NASA's Goddard Space Institute and one of the world's foremost climate-change experts, James E. Hansen puts it this way: "Humans now control global climate, for better or worse."

The Dismal Science

“There is no adequate defense, except stupidity, against the impact of a new idea.”
Percy Williams Bridgman (1882 1961) U.S. physicist, Nobel Prize, 1946.

That is, in a nutshell, the science.²⁾ Now I want to turn to the political economy. The fossil fuel industries, especially the oil and coal producers, are desperate to keep themselves in business. Some of them - such as BP (British Petroleum, which in 2001 nicknamed itself “Beyond Petroleum”) - are making some moderate efforts to shift with the times. Chevron, too, warns us that the era of cheap oil is over.³⁾ But there is a clearly evil sister in this mix: ExxonMobil, whose profits of over USD 40 billion made Fortune 500 history for 2007.

What has this to do with the IPCC? A great deal. The IPCC reports, shocking as they are, are in fact rather conservative. In part, this is due to the process. Any collective effort on such a vast scale, with input from so many authors, must almost inevitably be forced towards a rough average of research results. We are shining a flashlight in the dark, and see best what's lit by the centre of the beam.

On top of that, the beam of the IPCC flashlight shows us the recent past, a little like the starlight we see is from an older universe. This time-lag is because the IPCC panel collects research according to a deadline. All research results for consideration by the panel in drafting its reports must be submitted well in advance of the actual release of the report. This is only to be expected. The process of studying research results and writing reports would be impaired were additional new evidence constantly being fed in to it. As with any complex report or book, there comes a point when accumulating information and data has to end and the process of writing about it begin. The IPCC's problem, in this respect, is not so much the process as the frequency of the reports. Were the IPCC reports more frequent than once every several years, our flashlight would be able to tell us more about what is going on.

More frequent assessment seems especially important if the phenomena being studied are changing, and the pace of change accelerating. This is precisely what

2) and rather optimistic science, if anything, as I shall describe below

3) <http://willyoujoinus.com/>

recent research results suggest is the case with climate change. These results came in too late to make it into the ambit of the IPCC 2007 study. The new research results suggest very strongly that the IPCC's findings are, if anything, too optimistic. Whether this concern, which is voiced by prominent scientists, is correct or not is a crucial question for all of us. For planning and other purposes, we need to know if the risks we confront are worse than even the dour assessment of the IPCC. Indeed, scientific work on the climate and related phenomena are now recognized by the UK and US defence establishments as matters of national security, as we will show you below.

Let us use a concrete example of what we mean by the above concern. Consider that James Hansen, the above-noted Director of NASA's Goddard Space Institute, has sought to have a modified IPCC process put in place. Due to his standing as a central figure of scientific authority in the climate change debate, he is constantly receiving reports of recent work and the concerns of scholars who study the fluid dynamics and other processes of ice sheets. Very recent work in this field suggests that the disintegration of the polar and Greenland ice sheets is taking place more rapidly than was previously believed.⁴⁾ The IPCC report deadline was too early for the panel to incorporate this research and consider it in drafting its report. And the next report is likely to be released in 2013, about the time when research suggests the Arctic will be ice-free in the summer. In the meantime, there is no central, authoritative forum - like the IPCC - to gather these recent findings and consider whether they all add up to a profound warning signal that we ignore at our peril. Thus Hansen believes we require a more frequent process of reporting through the IPCC. He and his colleagues suggest that we could perhaps create bodies that specialize in particular areas (such as the ice-sheet issue) and are thus able to report more frequently.

It must seem incredible that this is not already being done. The risks we face are clearly enormous. Thus the more information we have to assess the scale of the risk, possible counter-measures, and so on, the better, correct? That should be what the North Americans call a "no-brainer," a matter that is so simple it requires very little thought.

Let me allay any concern that more frequent reporting might lead to a kind of competitive sensationalism. Note that scientists, especially very good scientists, are

4) A useful archive of articles on this topic can be found at:

<http://geology.com/news/2008/antarctic-ice-sheet-melting-speeds-up.shtml>

inherently conservative. Through repeated experiment, observation and verification of data, they tend to seek the highest level of certainty concerning their work before publishing it. The scientific community has a host of formal as well as informal penalties for those who seek attention by rushing sensational results into the public domain. Other scientists will inevitably try to reproduce your experimental results, especially if you become a celebrity. Recall the disgraced South Korean cloning scientist Hwang Woo-suk, whose startling research results turned out to be fraudulent when others tried out his cloning methods. In January of 2006, he plummeted from being a Korean national hero to a figure of contempt who pleaded for forgiveness. His professional career is ruined, and he stands as yet another object lesson for the rest of the scientific community.

Painstaking attention to detail and veracity is a valuable ethic in science and needs to be preserved. Yet when it comes to climate science, we need a more rapid and efficient process of accumulating recent observations and assessing their significance. Thus in the March 23, 2007 edition of the specialist journal *Environmental Research Letters*, Hansen warns “that a ‘scientific reticence’ is inhibiting communication of a threat of potentially large sea level rise.⁵⁾ Delay is dangerous because of system inertias that could create a situation with future sea level changes out of our control. I argue for calling together a panel of scientific leaders to hear evidence and issue a prompt plain-written report on current understanding of the sea level change issue.”

One might wonder why Hansen had to go public with his call for something so obvious. Rest assured that you will not be left wondering once you have read the points detailed below.

Corpus Delicti

“Oh what a tangled web we weave, When first we practise to deceive!”

Sir Walter Scott, *Marmion*, Canto vi. Stanza 17. Scottish author & novelist (1771–1832).

First, let me return to the flashlight metaphor. Surely the hand holding the flashlight is as critical as the quality of the beam. The Bush regime and its

5) The article can be viewed at : <http://www.iop.org/EJ/abstract/1748-9326/2/2/024002/>
<http://arxiv.org/ftp/physics/papers/0703/0703220.pdf>

supporters in the American oil industry thought so as well, so they mobilized against the head of the IPCC replaced in 2002. As the *New Scientist* reported on April 19, 2002, “Robert Watson, one of the world’s leading climate scientists, has been ousted from his job as chairman of the UN’s Intergovernmental Panel on Climate Change. This followed the withdrawal of support by the US government, apparently at the behest of the oil company ExxonMobil, which had lobbied against him.”

But there is more, much more to this story. The conservative-leaning *Daily Telegraph* of May 15, 2002 reported that it holds a leaked memorandum from Exxon to the Bush administration. The memo showed that Exxon not only urged the Bush regime to replace Watson as chair of the IPCC; it also recommended personnel changes in the US delegation to the IPCC “to assure none of the Clinton/Gore proponents are involved in any decisional activities.” The specialist journal *Power Economics* also notes in its May 31, 2002 edition that “The US had announced earlier this month [ie, May of 2002] that it would not support Watson’s re-election, a move environmentalists believe reflected the Bush administration’s stance on climate control treaty negotiations.” It is small wonder, then, that the same edition of the *Daily Telegraph* goes so far as to quote Greenpeace spokesman Ben Stewart’s wry comment that “Who can now doubt that US policy is being steered by the world’s largest oil company?”

Now, surely this assertion concerning ExxonMobil smacks of conspiracy theory. But the 2002 removal of Watson as head of the IPCC was a political move by the newly installed Bush White House. The incident has in fact been taken up by the US House of Representatives’ Committee of Oversight and Government Reform at their website.⁶⁾

Why is one part of the US Government writing criticisms about another part of the US Government? As a result of the 2006 mid-term elections, the Democrats gained a majority in Congress. They then began using the investigative powers of that arm of the US Government to see what the White House and its allies in the previously Republican controlled Congress have been up to. There was a clear political agenda in this, of course (hint: the 2008 Presidential elections), but that fact matters far, far less than the credibility of the evidence they adduced.

Thus the US House of Representatives’ Committee of Oversight and Govern-

6) http://oversight.house.gov/features/politics_and_science/example_global_warming.htm

ment Reform points out that “After the release of the 2001 [IPCC] report, ExxonMobil lobbied the Bush administration for Dr. Watson’s ouster. A February 6, 2001 memo sent by ExxonMobil to John Howard of the Council on Environmental Quality at the White House criticized Dr. Watson and asked, ‘Can Watson be replaced now at the request of the U.S.?’ ExxonMobil opposes the regulation of carbon dioxide emissions that contribute to global warming and gives over a million dollars a year to groups that question the existence of global warming.”

The Democrats may have an agenda, but they are very good in making their case. They cite all the claims made in their brief on-line article. For example, the ExxonMobil memo is available as an on-line citation.⁷⁾

The memo is titled “Regarding Bush Team for IPCC Negotiations,” and was sent to the Bush White House right at the beginning of its first term in office. It describes the then-IPCC head Robert Watson as “hand-picked by Al Gore” and as a rather sneaky character with a “personal agenda.” Then the memo specifically asks, and in bold font on its first page, “Can Watson be replaced now at the request of the U.S.?”

As an aside, this release of information is surely a profound testament to the value of having a viable opposition party and the institutional means for it to check the party in power. Competition in government, plus periodic change in the party in power, appears to provide valuable and strong incentives and means to hold people in government accountable. That is particularly critical when there are rivers of money flowing in from powerful interest groups. The same Exxon Mobil that requested the IPCC head be axed in 2001, for example, reported lobbying expenses of US\$14,520,000 in 2006, more than double that of the previous year’s US\$7.14 million.

Surely a lot of that money will flow towards the now resurgent US Democrats, at least those who might side with the oil lobby in the fight for regulatory and other favours. So simply having a viable opposition party (or parties) is not on its own enough for a vibrant democracy. Having a healthy civil society with lots of active NPOs and the like seems equally essential. Groups on the outside of the political world per se have to be watching government, and the media by themselves seem increasingly unequal to the task. Ensuring a high degree of accountability is obviously a complex and difficult process. But the payoffs, or positive externalities,

7) <http://www.nrdc.org/media/docs/020403.pdf>

from an engaged public are large. Perhaps the Bush years will remind us all that, as Plato warned, “one of the penalties for refusing to participate in politics is that you end up being governed by your inferiors.”

It's Elementary, My Dear Watson

In any event, let us return to the memo. What was it about IPCC chief Robert Watson that made the Bush regime and Exxon want him out? Was he in fact a dangerous radical, bent on destroying industry? Here is what appears to be a relevant bit of information on his background. He has long been a forceful advocate for protecting the environment. For example, the November 26 1992 *Boston Globe* tells us that back then Watson was a prominent NASA space scientist who warned an international meeting in Copenhagen of the need to act fast on the ozone-hole problem (which was caused by chlorofluorocarbons, or CFCs). Watson argued that “the situation with respect of ozone depletion is significantly worse” than it had been during the previous international meeting in 1990, 2 years before.

In what we can be read as a political-economy prelude to the Bush-era debate on global warming, it turns out that Watson and other scientists were correct. In fact, the global community acted just in time on the ozone and CFC problem. A 2005 IPCC report showed that quick action in the wake of 1992 has seen ozone levels stabilize, but the well-known and ominous “ozone hole” over the Arctic is expected to continue for decades. And what if we had not acted? The dangers from “business as usual” in the production of CFCs and other chemicals responsible for opening the ozone hole include a sharply increased incidence of skin cancer, widespread damage to plant and marine life, and other grave consequences.⁸⁾ Just the sort of consequences one would expect from stripping away the earth's evolved defences against the ultraviolet radiation that pours out of the sun.

And what of the costs of dealing with the ozone problem? Opponents of action argued that we would incur horrendous costs just because some radical scientists hated industry. We were still being warned, even in 1995, that restricting CFCs would impose “a [US] \$1000 burden on every household with no obvious benefit,” that “scientific evidence indicates that CFCs are causing no substantive damage to our atmo-

8) <http://nihongo.wunderground.com/education/holefaq.asp>

sphere,” that climate scientists are “stifling debate,” and so on.⁹⁾

But even back then, it was clear that controlling the problem would not be as costly as critics insisted. It was also clear to experts that NOT controlling the problem posed enormous risks. A very useful summary of the evidence is available at the on-line site of “The Weather Underground” (the most widely translated and most fascinating weather site in the world). The summary shows that as early as 1994, the “United Nations Environment Programme’s Economic Options Committee observed that “Ozone-depleting substance replacement has been more rapid, less expensive, and more innovative than had been anticipated at the beginning of the substitution process. The alternative technologies already adopted have been effective and inexpensive enough that consumers have not yet felt any noticeable impacts (except for an increase in automobile air conditioning service costs).” Shortly afterwards, two dozen industry experts estimated that the total cost of phasing out CFCs in the industrialized countries was US\$37 billion to business and industry, and US\$3 billion to consumers. On top of that, a study done for Environment Canada and presented to a UN meeting in 1997, calculated the cost of reducing and then eliminating CFC production to total US\$235 billion through the year 2060. The same study also noted that over the same period we would likely save US\$459 billion through decreased UV exposure to marine life, plants, forests, crops, plastics, paints and other outdoor building materials.” And these savings were exclusive of the decreased health care costs we could expect from fewer skin cancers.¹⁰⁾

There are two very important points here. One is that the ozone hole warnings were accurate in their scientific assessment that human activity was degrading the ozone layer and that we faced enormous risks. That’s what you would expect from a massive and painstaking process of laboratory-based science. No one can precisely calculate how, say, X tons of CFCs and related ozone-depleting gases will destroy Y amount of stratospheric ozone and result in Z increases in skin cancer, crop damage, and so on. The basic mechanism of ozone depletion is understood, but projections of its consequences involve far too many variables to allow for precision. That lack of precision is not a logical reason for rejecting the science, however. Many people seem eager to do this with ozone depletion as well as climate change. But a simple analogy of this kind of thinking would be to complain that no one can precisely calculate the

9) <http://www.sepp.org/key%20issues/ozone/ozonefranklin.html>

10) <http://nihongo.wunderground.com/education/holefaq.asp>

physical trauma one is likely to endure from walking onto a freeway and being struck by one or more speeding automobiles. Would it be logical to conclude that there is no credibility to the basic physics of what happens when a fast car hits a pedestrian? Do you think any of the critics of ozone-depletion theory and climate change science would walk onto a freeway? Would the reader walk out there with them? The answer in both cases is clearly no. The point is not precision but rather the clear risk of serious injury. The warnings by climate experts such as Watson were thus quite reasonable.

The second important point is that the countermeasures not only were NOT as costly as ozone skeptics claimed; the countermeasures actually saved us from larger losses. The counterarguments were an example of obfuscating the issues by interests that were about to become losers (via being phased out), or at least faced serious transition costs (through having to shift production processes, etc). Where costs are concentrated among powerful actors and where benefits (eg, a protected environment) are diffused among society or humanity as a whole, it is always politically difficult to implement reform. This is because the directly affected interests are well-organized and have powerful incentives to lobby hard against change. By contrast, the disorganized and indirectly affected public faces enormous costs, but later on. Getting people to understand the scale of risks and then act against them, or at least strongly support such action, is a very difficult kind of politics. We saw this politics clearly with CFCs. The huge chemical firm Du Pont - which made fully 1/4 of the world's CFCs in the early 1970s - launched a massive advertising campaign in 1975. Du Pont's ads claimed that CFCs were not harming the ozone layer, and that there was no sound scientific proof to that effect. Other interests amplified Du Pont's message. This lobbying made it very difficult to implement controls on ozone depletion until the evidence of the dangerously expanding ozone hole over the Antarctic became too stark to ignore.

Optimists sometimes claim that the global community learned from the fight against ozone-depletion. They believe we have both learned that our activities can harm the entire globe but that through cooperation we can minimize the risks and costs. Many climate scientists, including James Hansen of NASA, argue this way. They do this in order to stress that the successful fight against ozone-depletion shows there is hope of success in the far larger fight against global warming. Surely that point has much truth in it, and making it is essential. But we also need to keep our

eyes open about the roles of externalities and risks and the political economy incentives of confronting them versus pretending they are not there.

From the Ozone Hole into the Hothouse of the IPCC

“‘Curiouser and curiouser!’ Cried Alice”

Alice in Wonderland, Lewis Carrol

In 1997, after playing a central role in the fight against CFCs and other ozone-depleting chemicals, Robert Watson was made head of the IPCC. He worked hard at the IPCC to bring attention to the even larger threat of global warming, and got penalized for it. As the *Financial Times* of August 29, 2002 tells us, “Mr Watson, now chief scientist at the World Bank, was removed as chairman of the IPCC this year following pressure from the US administration and Exxon, the oil group, apparently concerned at his success at moving global warming up the political agenda.”

The Bush neocons were not simply acting as lackeys for Exxon. They also seem to have had their own reasons for getting rid of Watson. The April 30, 2002 edition of “Foreign Policy in Focus” argued that the action against Watson was part of a larger Bush-regime removal of officials at multilateral institutions whom it did not like. These apparently included the UN High Commissioner on Human Rights, Mary Robinson (whom the neocons felt was “too difficult to work with”) as well as the removal of Jose Mauricio Bustani, head of the Organization for the Prohibition of Chemical Weapons. The neocons wanted to construct a more compliant global community, even as they weakened America’s commitments to its major institutions, especially the UN, the World Court, arms-control treaties, the Kyoto Treaty, and so on. This is a clear-cut case of wanting to have your cake and eat it too.¹¹⁾

Let me get back to the saga of Watson at the IPCC. The April 19, 2002 *New Scientist* article cited earlier goes on to observe that Watson’s replacement as head of the IPCC, Rajendra Pachauri (an Indian science administrator and economist) is not seen as a “patsy.” Pachauri is the first IPCC head to lack training as an atmospheric scientist, but does have strong technical knowledge on how industry can reduce emissions. Pachauri was apparently acceptable because - as an Indian - he was seen as

11) <http://www.fpif.org/commentary/2002/0204un.html>

a representative of the developing world and also “has a reputation for being less abrasive towards industry than Watson.”

From the perspective of the neocons and the vested interests, getting rid of Watson surely made perfect sense. Call it organizational “shock and awe,” similar to the bombing strategy used at the start of the Iraq War. We all know from reading the now sadly deceased Peter Drucker - and other observers of the human condition that leadership is the sine qua non of any organization. Common sense also tells us all that the controversial replacement of the head of any organization sends powerful signals throughout it and the larger community that it belongs to. A weakened leadership means a weaker organization. Speaking with bitter irony, surely that is a brilliant strategy to employ with a key global organization when the world is facing perhaps its direst crisis.

“Changeable as the Weather”

“The purpose of foreign policy is not to provide an outlet for our own sentiments of hope or indignation; it is to shape real events in a real world.”

John F Kennedy, September 26, 1963

There is no clear public record whether the Japanese government was worried about any of this. These were the Koizumi years, when much was sacrificed to foster warm relations with Bush and the neocons. Japan’s potential to take a global leadership position on environmental issues was also largely squandered (as it continues to be), unfortunately, as the *New York Times* grasped very early, even before 9 11. The July 4, 2001 edition of the Times carried a concise and remarkably good - analytical piece on Koizumi, climate change and Japan-US relations by their former Japan correspondent, Howard French. The article was titled “changeable as the weather,” and noted that Koizumi found himself stuck between the aggressively pro-environmental position of the EU and the obstructionist tactics of the Bush regime. The Europeans were keen to diplomatically push the Bush regime into the Kyoto agreement. And the agreement itself, noted the article, represented a “rare opportunity for Japan to take the pivotal position on an issue of major international importance.” But the Koizumi people balked at the challenge, and apparently decided to try speaking out of both sides of their mouth and hope no one at home or overseas would

notice. The Times noticed, however, particularly because Koizumi's reputation in Japan centred on his being a "straight-shooter." The Times sought to understand why "from Washington to London to Paris, sometimes on the same day and within the same city, [Koizumi's] position on what is probably the most ambitious international environmental agreement seemed to shift by the hour or the audience."

In mid-June of 2001, Koizumi Showed a flash of independence when he depicted as "deplorable" the Bush regime's flat-out refusal to submit the Kyoto agreement to Congress. But by June 30, when Koizumi was in Washington for a photo session with Bush, he was saying exactly the opposite. In Washington, Koizumi praised Bush as a person who is "enthusiastic about environmental issues." And then he went on to insist that "I believe if the United States and Japan were to cooperate in dealing with environmental issues, we will be able to create means which will be more effective in dealing with the global warming issue and also in reducing our gas emissions. And I believe that in doing so, we will further be able to cooperate with the rest of the world."¹²⁾

The *New York Times* was evidently struck by the degree of obeisance Koizumi displayed in these comments and others. Through interviews in Japan, the Times' reporter, Howard French, sought reasons for Koizumi's unwillingness to speak frankly on the environmental issue. One interviewee - a representative of Friends of the Earth Japan - remarked that Koizumi's stance reflected the relative unimportance of the environment among his policies. The interviewee also believed that Koizumi's focus on economic reform meant he was willing to softpedal the environmental issue, since "he needs the Bush administration's wholehearted support for his economic reforms."

That is no doubt the "common sense" version of events. There were rumours at the time that the Bush regime were displeased with then-Foreign Minister Tanaka Makiko's critical comments concerning their rejection of the Kyoto treaty. All was not perfect in the US-Japan alliance. But on the other hand, for Washington Koizumi represented the last best hope for the aggressively free-market economic reform they wanted to see happen in Japan. Keep in mind that in early 2001 the US bubble economy was already collapsing and Japan's monumental banking crisis was threatening to drag the global economy into recession. Concerning Japan's economy, Kenneth Courtis, then-vice chairman for Asia at Goldman, Sachs in Tokyo told the

12) <http://www.whitehouse.gov/news/releases/2001/06/20010630-2.html>

June 30, 2001 *Washington Post* that “everyone is reduced to praying, and hoping that some of the economic reforms can be put in place.” So it seems highly unlikely that the free-market, small-government Bush regime would have punished a Koizumi statement of commitment to Kyoto by supporting a return to the porkbarrel old guard of the LDP. In foreign policy, you take what you can get, and avoid emotionalism. Koizumi gave the Bush people pretty much all they wanted.

Keep in mind that Japan was not without card to play vis-à-vis the Bush regime. The June 29, 2001 *Christian Science Monitor* noted that the newly installed Bush regime were keen to use strengthened ties with Japan to send a signal to China. Bushism was in large measure a rejection of anything the previous (and, by the neocons, thoroughly despised) Clinton regime had done. So where the Clinton people had dealt with China as a “strategic partner,” the Bushies sought to deal with China as a “strategic competitor.” There were military and political dimensions to this policy. The March 27, 2001 edition of *Time* noted that the new Defence Secretary, Donald Rumsfeld, was seeking to “rebuild the US military around a focus on the Pacific theatre.” Rumsfeld and the other neocons wanted to redraft America’s defence posture in the wake of the implosion of the Soviet Union. At the same time, having a foreign threat made running the country somewhat easier, *Time* noted, as “America is notoriously difficult to govern in the absence of an enemy at the gates.”

In short, the Bush regime had its own favours to ask of Koizumi, leaving Japan a fair amount of room to manoeuvre on the climate issue. Perhaps Koizumi sensed this at some level of consciousness, accounting for his global trail of contradictory statements on Japan’s policy. Imagine if Koizumi had shown more fortitude and foresight. The Europeans were eager to have an explicit commitment from Japan that it would ratify Kyoto even without American participation. The July 2, 2001 *Washington Post* observed that Koizumi’s failure to declare Japan’s commitment to Kyoto (which Japan ratified on May 31 of 2002 anyway) dealt “a serious blow to European Union leaders, who have spent months trying to woo the Japanese and now have no leverage over Bush going into a new round of negotiations in Bonn this month.” Bush, by contrast, was left “in a much stronger position to dictate the pace and direction of future negotiations over an international global warming treaty.”

We have no clear indication that Koizumi had thought these issues through, or whether he even seriously tried to. Perhaps he did but simply got caught up in the political theatre of Washington and presidential politics. If we go back to the Howard

French article in the July 4 2001 New York Times, we find a perceptive comment on this phenomenon. French cites the political scientist Okano Kaoru. Okano points out that “When Japanese politicians go to the United States, they are just engulfed by the American atmosphere, and when they go to places like Camp David they forget their original positions and are often overwhelmed by the agenda of the American side.” And then Okano adds wryly that “When we saw Koizumi playing baseball with Mr. Bush, we knew he was totally immersed in the American environment.”

In any event, on July 23, 2001, the EU took the leadership on the environmental issue and secured the agreement of 178 countries among the 180 signatories to proceed with the Kyoto Treaty. This success blocked the Bush regime’s efforts to kill the treaty altogether. The Kyoto agreement was, however, greatly watered down after what the July 24 Financial Times described as “months of acrimonious squabbling, four days of tense negotiation and ever-diminishing expectations of the treaty’s survival.” The Bush regime was completely isolated and the Kyoto Treaty itself was named after Japan’s own historic city. And since the mid-1970s Japan has sought to use environmentalism as a central feature of its “soft-power” politics (distinct from the “hard power” of military force). Japan thus found itself essentially compelled to side with the EU. But even then, the Koizumi regime extracted an exemption from the treaty as the price of their vote. According to the July 24 2001 *Herald Sun* of Australia, Japan “demanded a softer approach on compliance mechanisms than the European Union.”

Do these seem smart realist bargaining tactics? Perhaps they are. But imagine the cynicism that developed about Japan’s positions during the bargaining and when these facts came out in the international press. Fostering cynicism seems a poor base for a strategy of maximizing soft power.

Clear Skies, No Rules: Happy Valentine

Diplomatically isolated, the Bush regime then tried to split the Kyoto approach by announcing an alternative mechanism in advance of a visit to Japan. On Valentine’s Day of 2002, Bush unveiled his “Clear Skies and Global Climate Change Initiative.”¹³⁾ The approach specified a voluntary target of an 18% cut in “greenhouse

13) <http://www.epa.gov/clearskies/>

gas intensity” (the amount of emissions per unit of economic output). But the Bush plan included no targets for CO₂ emissions (only sulfur dioxide, nitrous oxide and mercury), no compulsory targets and no compulsory disclosure of emissions by firms enrolled in a so-called “emissions registry.” Enrollment in the registry would also be voluntary. In the February 15, 2002 *Guardian*, Eileen Claussens of the Pew Center on Global Climate Change, derided the plan as “business as usual.” And in its May 31, 2002 edition, the energy industry journal *Power Economics* pointed out that Bush’s numbers for enhanced “greenhouse gas intensity” simply called for the energy efficiency increases that the US had achieved in the 1990s with no specific public-sector incentives. That was another way of saying that the plan was meaningless. The article openly warned that “more and more companies perceive regulation of greenhouse gases as an inevitable reality and are ready to advance from the question of whether there will be a mandatory programme, to how it will be structured and when it will come into effect.” In short, they called on the Bush regime to bring in real rules.

There was also strong concern that the Bush approach would encourage other countries to exit the Kyoto agreement and thus wreck any chance for global cooperation. Hence the plan was criticized in virtually all the world’s major capitals. But when Bush landed in Tokyo on February 18 of 2002, Koizumi declared at a joint press conference that “the United States has come up with a very positive proposal.”¹⁴⁾

A few years later, the Australians and the Americans worked together to produce a new alternative: the Asia-Pacific Partnership On Clean Development And Climate.¹⁵⁾ This non-treaty agreement came into effect in January of 2006. It groups Australia, India, Japan, China, South Korea and the US in what is essentially an agreement to exchange information and perhaps cooperate on developing technology. But as with “Clear Skies,” there are no mandatory restrictions on emissions or any other serious mechanisms for enforcement. The ploy was obvious. US Republican Senator John McCain - the Republican candidate in the 2008 presidential elections - told the January 12, 2006 *The Australian* that the agreement “amounts to nothing more than a nice little public relations ploy. It has almost no meaning. They aren’t even committing money to the effort, much less enacting rules to reduce greenhouse gas

14) <http://www.whitehouse.gov/news/releases/2002/02/20020218.html>

15) <http://asiapacificpartnership.org/default.aspx>

emissions.” But an August 6, 2005 article on the origins of the agreement observes that its Australian and American authors were particularly keen to get Japanese participation. The article, written by an enthusiastic supporter of the agreement, says the Japanese decision came right from Koizumi himself. Koizumi apparently decided to participate because Japan wasn’t going to meet its own Kyoto commitments and was “reluctant to say no to such close allies as the US and Australia.”

The above is a measure of the negative political externalities that emerge from extreme Japanese dependence on the US alliance. Foreign policy is a matter of making the best choices given a set of constraints and goals. As many domestic and overseas observers have noted, Japan tends to be too cautious and complacent when it comes to the US-Japan relationship. As in Japan’s generally tense and rarely friendly relations with Asian countries, the temptation is simply to rely on and acquiesce to the US. But this excessive reliance has costs. In this case, Japan’s credibility as a leader on climate change has been severely undermined.

Back to Undermining the IPCC

With Japan onside in the “Asia-Pacific public relations ploy” (to paraphrase McCain), the Bush regime turned its attentions back to the IPCC process and continued its efforts to undermine the prospects for coordinated global action on climate change. These efforts were apparent in the US IPCC delegation’s release of the confidential draft of the IPCC’s 2007 report in May of 2006. The May 4 2006 *Guardian* wrote that “The move to effectively publish the findings of the influential Intergovernmental Panel on Climate Change (IPCC) has surprised experts, who say it could undermine the final report when it is released in February.” Experts also expressed concern that early release of the findings was an effort to deflate the impact of the final report itself. Strategic leaks and so-called “trial balloons” are often used in politics and policymaking to test reaction to new ideas as well as soften up potential opposition. But the boldness of the Bush regime was startling. As the same edition of the *Guardian* notes: “[The confidential draft] was posted on the web by the US Climate Change Science Programme, a government office that coordinates global warming research, which said it made the report available for ‘expert comment’ to help frame its official response. Its website says participants should not quote or redistribute the document, which can be accessed with a password provided

automatically to anyone who sends an email.”

This level of cynicism is simply incredible. The Bush regime’s staff clearly viewed the issue of climate change as politics-as-usual, as a political game. They simply did not regard it as the unprecedented global crisis that virtually all experts inside the US and overseas realize it to be. These are the people that the Koizumi regime decided to ally itself with.

Muddying the Science on the Home Front

“Some of the scientists, I believe, haven’t they been changing their opinion a little bit on global warming? There’s a lot of differing opinions and before we react I think it’s best to have the full accounting, full understanding of what’s taking place.”

George W. Bush, Presidential Debate, Oct. 11, 2000

The Bush White House was at the same time aggressively stifling internal debate on climate change. For example, after receiving a package of leaked White House documents, the June 8, 2005 *New York Times* declared that Phil Cooney, chief of staff for the White House Council on Environmental Quality, had been interfering in US climate research reports since 2002. The role of the Council on Environmental Quality is to assist in devising and promoting administration policies on environmental issues. Before going to the White House in 2001, however, Phil Cooney, “was the “climate team leader” and a lobbyist at the American Petroleum Institute, the largest trade group representing the interests of the oil industry. A lawyer with a bachelor’s degree in economics, he has no scientific training.” The Times also pointed out that “Starting with the negotiations leading to the Kyoto Protocol climate treaty in 1997, [The American Petroleum Institute] has promoted the idea that lingering uncertainties in climate science justify delaying restrictions on emissions of carbon dioxide and other heat-trapping smokestack and tailpipe gases.”

The same article in the *New York Times* also quoted the president of the highly respected Pew Center on Global Climate Change¹⁶⁾ that the Bush Administration know that they have got “three more years, and the only way to control this issue and do

16) http://www.pewclimate.org/about/index_jpn.cfm

nothing about it is to muddy the science.” The Pew Center is not a political organization. It is a non-partisan “fact tank” that specializes in polling America and the world and conducting social science research. It very deliberately “does not take positions on policy issues.”¹⁷⁾ Note as well that the Pew Centre’s “Business Environment Leadership Council” (BELC) group of member companies includes such firms as Boeing, Royal Dutch/Shell, Toyota, Deutsche Telecom, and other multinationals.¹⁸⁾

Moreover, by the time the above articles came out, the Bush regime’s efforts to stifle the climate change debate were well-known in the specialist community. James Hansen, the NASA scientist who we introduced above, went public about the problem as far back as October of 2004. At an October 26, 2004 talk at the University of Iowa, for example, Hansen declared that “In my more than three decades in government, I have never seen anything approaching the degree to which information flow from scientists to the public has been screened and controlled as it is now.”¹⁹⁾ Note that Hansen is not only one of the world’s foremost experts on climate change; he is also the first scientist to have testified to congress on the issue, back on June 23, 1988. Hansen was then director of the NASA Institute for Space Studies. It is thanks to the efforts of people like Hansen that the scale of the problem is finally starting to be recognized in the political sphere. But consider how much time has been lost because the transmission of information from the scientific community was so relentlessly interfered with.

Phil Cooney, noted above as chief of staff for the White House Council on Environmental Quality, resigned on June 14, 2005, after the *New York Times* report came out. The Bush White House of course insisted that Cooney’s resignation had nothing to do with the exposure of his anti-environmental editing. That assertion is, quite frankly, difficult to believe since he resigned about a week after the fact of his meddling was published in the Times. In any event, Cooney quickly found a job with ExxonMobil, working as a lobbyist. The unashamed openness of this *amakudari* is startling testament to the politicization of the climate change issue as well as the Bush Administration’s ability to get away with it in broad daylight (or perhaps more aptly, under cover of the so-called war on terror).

The meddling was also not limited to changing the tone and content of scien-

17) <http://pewresearch.org/about/>

18) http://www.pewclimate.org/companies_leading_the_way_belc/company_profiles/index.cfm

19) <http://www.msnbc.msn.com/id/6341451/>

tists' reports. Keep in mind that in American federal politics, the President names thousands of appointees to oversee federal agencies. This veritable army of Bush appointees were hard at work in many areas, but particularly anything related to climate change science. They went so far as actively trying to suppress climate scientists' statements. The February 11 2006 *Washington Post*, for example, covered a special panel discussion at the New School in New York. The panel concerned the suppression of climate change science. The National Oceanic and Atmospheric Administration - a federal agency - was noted to have adopted a policy of requiring that a "minder" be present when scientists discuss their findings with journalists. Hansen participated on the panel, and was quoted as having declared that "it seems more like Nazi Germany or the Soviet Union than the United States."

The day before, George Deutsch, a 24-year old Bush appointee to NASA, had been forced to resign earlier in the week after it was revealed that he had "edited scientists' writings to conform to administration views and tried to limit reporters' access to Hansen." The February 8 2006 *New York Times* pointed out that Deutsch was shown to have lied on his resume as well. He claimed that he possessed a Bachelors of Arts degree from prestigious Texas A and M University, when he had not in fact graduated. In the above *Washington Post* article, Deutsche is quoted as having tried to defend his activities with the following: "I encourage anyone interested in this story to consider the other side, to consider Dr. Hansen's true motivations and to consider the dangerous implications of only hearing out one side of the global warming debate."

Deutsch is clearly just a young and rather absurd minion in the larger scheme of things, so what he has to say has no value as a statement of fact. But what he writes is interesting as a reflection of his own motivations and his own faith that the climate change issue is a matter of partisan politics. Consider the level of self-delusion it requires to imagine that the global warming debate is simply a matter of political positioning and that one is serving some larger purpose through distorting scientists' statements on the issue as well as blocking the media's access to them.

Incredibly, these frenetic efforts to block the flow of information have not stopped. The Environment News Wire of April 4, 2007 reported that the Commerce Department (which oversees several agencies, including the National Oceanic and Atmospheric Administration) is seeking to control everything that federal government climate, weather and marine scientists say to the media or in public, even when they speak as private citizens (which is how James Hansen avoided strictures on his

statements as an employee of NASA). The new order was to take effect on May 14, 2007, 45 days from its official announcement on March 29, 2007. Its content is, as of this writing uploaded to the Commerce Department's website.²⁰⁾ The order requires that federal scientists obtain, two weeks in advance, the approval of the agency before they speak or write (whether on-duty or off-duty) on any scientific matter deemed to be "of official interest" to the agency. Attorney Jeff Ruch, executive director with Public Employees for Environmental Responsibility, or PEER, noted that the law is both worrisome as well as ridiculous: "This conflict means that every scientist who answers an unexpected question at a conference puts his or her career at risk by giving an honest answer."

The Mounting Backlash

"Our nation has both an obligation and self-interest in facing head-on the serious environmental, economic and national security threat posed by global warming"

US Senator John McCain, May 10, 2005

http://mccain.senate.gov/press_office/view_article.cfm?id=176

A valuable report on these kinds of interventions in scientific work and the publication of research results is "Atmosphere of Pressure: Political Interference in Federal Climate Science" (<http://www.whistleblower.org/doc/A/Atmosphere-of-Pressure.pdf>). This 80-page study of Bush regime interference was published in February of 2007 by the Government Accountability Project (GAP) and the Union of Concerned Scientists (UCS). Both of these organizations are well-regarded and trustworthy non-profits. Indeed, on January 30, 2007, their representatives were called to give testimony to the US House of Representatives Committee on Oversight and Government Reform, and their study has been posted to the same Committee's web site.²¹⁾

The study itself relies on a survey of 1600 climate scientists working at seven US federal agencies. About 19 percent of those surveyed responded. That figure is a very good response rate for a mail-in survey, especially one where respondents likely

20) http://www.commerce.gov/opa/press/Secretary_Gutierrez/2007_Releases/March/29_DAO_219_1.pdf

21) <http://oversight.house.gov/story.asp?ID=1162>

perceive some risk in replying. What is surprising is that about half the responses said they “perceived or personally experienced pressure to eliminate the words ‘climate change,’ ‘global warming’ or other similar terms from a variety of communications.” Other tactics have apparently included refusing media access to researchers with the politically “wrong” views or research results, holding back press releases, delaying interviews so the media lose interest, as well as the editing and other kinds of interference we reviewed in the examples above. In some cases scientific advice to members of Congress was also changed. As the February 3, 2007 edition of the *New Scientist* argued regarding the study’s findings, this is not the kind of behaviour one expects from a democratic government that spends US\$ 3 billion per year on climate research. The *New Scientist* adds that the climate change challenge is different from usual policy areas, where one expects some meddling in pursuit of ideological goals. Policymakers and the public (who pay, via their taxes, for the research) have a right to the information, as without it “they cannot make realistic plans for a future that may well be radically altered by climate change.”

This tide against the Bush regime’s interference began to flow fast and strong in the wake of the above events. Since the Democrats won control of the US congress through the 2006 mid-term elections, the facts began to pour out. For example, Cooney of Exxon Mobil was also called to testify before the House Government Reform Committee.²²⁾ On March 20, 2007, Cooney admitted to making changes in reports. The Committee’s staff totaled the number and character of the changes that he made, and the results are simply astounding. In 2003 alone, as the March 21 2007 edition of the “The Australian” reports, “there were 181 changes to a plan to deal with climate change that were aimed at playing down the scientific consensus on global warming. There were another 113 changes that made less of the human causes of climate change, and even changes made to herald potential benefits to higher temperatures.”

These are only a few examples of what went on during the Bush years. As the *New Scientist* put it, this sort of meddling in reports is not unknown. There are plenty of examples, where data and analyses of the economy or income distribution are “massaged” in order to legitimate tax cuts or some such policy initiative. But keep in mind that what is at issue here is the largest challenge that humanity has ever

22) the video of his testimony is available at : <http://oversight.house.gov/story.asp?ID=1214>

faced. These officials were blocking the flow of information on a matter that has no parallel in human history. Most germane to our purposes here, consider the scale of the backlash that was developing in American politics against this steadily emerging and completely surreal story. Unwary of externalities, Japan risked being caught on the wrong side of this backlash.

The Axis of Emissions

But the Bush regime are in fact only the most visible actor in a gang of governments that routinely interfere in the processes of analyzing and designing measures against global warming. Here we can perhaps borrow Bush's 2002 phrase "the axis of evil" (North Korea, Iraq and Iran) and amend it. We submit that there has long been an "axis of emissions" at work on undermining global action against climate change. We saw this axis at work quite plainly in the lead-up to the April 6, 2007 release of the IPCC's second report on the impacts of climate change.

This report detailed the risk of damages from global warming, and hence was a big red flag to the countries that want to pursue "business as usual." The report's release was preceded by close to a week of negotiations over the content's of the initial draft. Since the IPCC is a UN body, the political representatives of UN-member governments check the IPCC documents before they are released. The intensity of negotiation over the report's contents was unprecedented, according to news reports. Every day, negotiations over each and every word in the report dragged on into the early hours of the morning. The US, Russia, China, and the Saudis were largely lined up against the Europeans in seeking changes that toned-down the content of the report.

Indeed, the originally scheduled morning release of the report on Friday, April 6 was delayed into the afternoon, and followed a 24-marathon session of bitter negotiations over words and charts that depicted the level of risk we confront. The scientists who had prepared the document were in some cases so outraged at the efforts to tone down its content that they walked out in protest. The April 7 *Los Angeles Times* reported that many scientists found the process so frustrating that they simply do not want to participate in IPCC committee work again.

The same edition of the *Los Angeles Times* notes that among the items that were cut from the final report was "a table outlining how various levels of carbon dioxide emissions corresponded to increasing temperatures and their effects." Saudi

Arabia, Russia and China have been identified in several news accounts as the countries responsible for this particular omission.

And Where did Japan Stand?

The Japanese press of course carried articles concerning the report and the wrangling over its content. The Japanese *Nikkei* of April 7 included an instructive section on page three that outlined the damage Japan is expected to incur over the next several decades. In most places, rainfall is expected to increase. In western Japan, the increase could be 20% over current levels. These increases in rainfall will lead to more flooding, landslides and other phenomena. There will also be more typhoons and heat waves, as well as even greater humidity. Moreover, because Japan's cities are clustered on the coast, we can expect as much as 2400 square kilometres of Tokyo, Osaka and other cities to be submerged, displacing about 4 million people. In addition, shifting temperature zones and other effects of global warming are expected to lead to a 40% drop in the size of the rice crop. This is very bad news for a country that has, on a calorie basis, only 40% level of food self-sufficiency to start with (the 2002 figures for France was 130%, for Germany 91%, for the UK 74%, and for the US 119%). Additional fallout from global warming include the spread of tropical diseases and pests into Japan's warming regions, and even elevated levels of pollen leading to worse hay fever.

The Japanese press was also reasonably responsible in reporting on the shockingly high levels of damage expected for the wider Asian region as well as Africa and the Pacific Islands. They noted, too, that there was plenty of politics in the process of drafting this report, especially the pressure to tone down the warnings. But the Japanese press failed to connect the dots and point out that these scenarios - bleak as they are - might be relatively optimistic compared to the scientists' initial picture of what is actually on its way. Considering the scale of damage Japan confronts, especially compared to the other developed countries, one would have thought the domestic press would have more interest in the issues.

Yet perhaps most surprising was the Japanese press' lack of interest in whether Japan's delegates stood with the EU countries in defending the original report, or with the US, China, Russia and Saudi axis of emissions and omissions. This lack of journalistic curiosity is bizarre. For one thing, we have already seen that Japan's

stand on climate change under the Koizumi regime was so - to be blunt - protean and hypocritical that it caught the attentions of the overseas press. Moreover, recall that the IPCC is in the midst of historic proceedings. Future generations of Japanese and other peoples will study this period in our history, tracing our painful evolution towards true global cooperation. This year's series of IPCC reports will surely stand as a milestone in our collective recognition of the scale of the crisis we confront. Now consider again the fact that the major dailies of Japan - still the second-largest economy in the world - did not see fit to ask what this country's delegates were up to in Brussels.

Had the Brussels meeting been about Olympic rules for sumo or something of that sort, would the press have been silent on Japan's stand? This is not to imply that sports are trivial, but rather to emphasize that there are some issues of such profound significance that the press are at least morally compelled to act as an organ of record and oversight. The press has a special role in a democracy, to act as a conduit for important information so that voters can assess the performance of their elected representatives. This is not some "ivory tower theory" of the media, but the stripped-down, bare essentials of modern democracy. The deluxe version would include a press devoted to investigative journalism and critical political analysis, but for the moment we'll settle for the basics, the no-frills fifth estate. The lack of the basics leads to what we have just discussed in the above.

And for a comparative example, note the failure of the American press to unpack the Bush regime's politics of fear in the wake of 9 11. The press - particularly the still-unapologetic Washington Post - got caught up in the maelstrom of hyper-nationalism and self-righteousness. Critical thinking about the costs of war, of abandoning internationalism, of the sparse evidence of "weapons of mass destruction," and so on was swept from the frenzied public debate. America has as a result lost much of its global standing as well as US\$ 2 trillion or so through the war it is losing in Iraq.²³⁾

Where Has Japan Been Standing ?

We should all wonder, too, where Japan stood when the framework for

23) http://www2.gsb.columbia.edu/faculty/jstiglitz/cost_of_war_in_iraq.pdf

discussing “climate change” was being set 2 decades ago. Here let me note the arguments made in a very well-researched book - titled *Unspeak: Words are Weapons* - that was released in February 2006 (the author has a blog: <http://unspeak.net/>). The book follows in George Orwell’s footsteps, but blazes innumerable new trails in describing how various words and phrases become political tools to blunt critical thinking, disguise the facts, and so forth. Most relevant to our purposes here is the author’s account of how and why “global warming” became “climate change.” Probably most of us recall reading or hearing somewhere that climate scientists shifted to “climate change” from “global warming” because of variation in the observed and expected effects of the greenhouse gas phenomenon around the world. Some areas might actually get cooler, at least for a while, a scenario that was greatly exaggerated in the 2004 movie *The Day After Tomorrow*. For most of us, this shift in terminology surely seemed sensible.

But according to the research done by *Unspeak*’s author Steven Poole, the facts are more complex. In a paragraph that merits citing in full, Poole tells us that “states with oil interests, including Saudi Arabia and the US (then as now the world’s biggest contributor to global warming), had specifically lobbied for the elimination of the phrase ‘global warming’ in agreements. The mention of ‘warming’ seemed to enshrine as fact the theory that burning fossil fuels was largely to blame for the heating of the planet. ‘Climate change’ instead gestured vaguely at an unspecific problem, without pointing the finger directly at any particular industry. For the same reason, Saudi Arabia had demanded that treaties refer only to ‘greenhouse gases’ and not specifically to ‘carbon dioxide’ - the gas emitted when fossil fuels were burned, that was the major contributor to global warming.” Keep in mind how the Bush regime’s “clear skies” programme also avoided dealing with carbon dioxide.

In short, lobbying in international institutions during the late 1980s largely shaped the discourse on global warming and hence the way we see the problem and think about solutions. We all recognize the effect. For educators, “climate change” offers a way to present the evidence to students and colleagues and not come across as a deranged tree-hugger. But we are - even in the toned-down IPCC report - talking about the extinction of 30% of terrestrial species, hundreds of millions of refugees from flooded and or salinated areas, massive declines in crop yields everywhere save - for a while at least - in a few places like northern Europe and Canada, and so on. We are talking about “global overheating, climate chaos, or maybe climate meltdown,” as

noted environmentalist Jeremy Leggett wanted it called.

Unspeak goes on to show - again, through extensive documentation - that the US Republicans and others used polls to determine which of the two phrases had more shock value. Their results told them that “warming” is active and “change” passive (since there is no agent making the change), so the latter was the politically preferred choice. The energy industry also mobilized behind a “Global Climate Science Communications Action Plan” that sought to emphasize doubts about climate science and otherwise obfuscate the central issues as much as possible. The media went along with the strategy, because the media’s first concern is to preserve what is called “balance” (the presentation of both sides of an argument) in reporting.

Counting Up Costs: The Stern Review

“Climate change is the greatest market failure the world has seen.”

The Stern Review, October 30, 2006

http://www.hm-treasury.gov.uk/newsroom_and_speeches/press/2006/press_stern_06.cfm

Of course, there is the perennial argument that the cost of combating climate change will be so high as to make us all paupers. This argument was deployed by the American Enterprise Institute in a response to Al Gore’s Oscar-winning 2006 documentary “An Inconvenient Truth.” The American Enterprise Institute’s reply is “An Inconvenient Truth...or Convenient Fiction,”²⁴⁾ a video by the Institute’s Dr. Steven Hayward that was hailed in the conservative press as a masterwork. The website for the video quotes a review in the “National Review Online” (a neoconservative media site) that “a star is born.” So desperate is the Institute to get its arguments into the debate that the video can be downloaded for free. Hayward depicts Gore as an extremist who is hiding an agenda of radically changing society and imposing huge costs on everyone through a large state. Hayward argues that it would be more effective as well as less costly in pecuniary and political terms to leave solutions to the problem to the market.

The question of costs is important. One reason is that the classic strategy in

24) <http://www.aconvenientfiction.com/>

blunting any policymaking which would entail costs is to emphasize them and downplay the costs of inaction. Costs have long been used as the reason not to do anything on climate change, as when Bush announced the US would not participate in the Kyoto Accord. It was also true of the ozone-hole issue, as we have seen. Indeed, the frightening costs of inaction also explain why there has been such a frenetic strategy of climate change denial: if you can hide evidence of long-term costs, people will fixate on the short-term costs of doing something serious and oppose it.

Think about it. We face similar choices in our daily lives, as when we opt whether or not to buy some type of insurance. If we knew for certain that the specified damage would happen, and when, we would pay close to the amount of the loss. We could then collect more than our damages and come out ahead, at least financially. But aside from death and taxes - as the saying goes - life is rarely a matter of certainties. So when we think of the future, even the near future, we think in terms of probabilities and risks. If we believe that the risks of damage are very small, we are likely to reject even a minimal burden to insure ourselves against it. And this is precisely why the Bushies and their allies have worked so hard to keep scientific evidence of global warming out of the public debate. As that strategy fails, they are placing more emphasis on the argument that the costs of doing anything serious about climate change - rather than symbolic measures - would be enormous.

The AEI video is an example of the strategy of claiming that serious action must impose enormous pecuniary, political and other costs. But the AEI and its ilk do not have credible arguments. No one can hide from the unprecedented negative externality of global warming, as its effects are - by definition - global. We could, of course, continue to try shifting most of the costs onto future generations, but that would be enormously immoral. Moreover, there is already plenty of evidence that confronting climate change is good insurance as well as a sound investment in the present. These facts were made plain, for economists, by the October 30, 2006 release of the UK Finance Ministry's Stern Review on the Economics of Climate Change.²⁵⁾ The Review takes its name from its author, Nicholas Stern, who was previously chief economist for the World Bank. From July of 2005, and at the request of UK Chancellor Gordon Brown, Stern gathered the available evidence on climate change and its potential costs.

25) <http://www.sternreview.org.uk/>

The quality press in the UK and around the developed world - with the odd exception of Japan - gave the report considerable and detailed attention. The report convincingly argues that climate change could cost as much as 20 percent of annual global economic output. And note that these costs do not include such incalculable costs as the projected loss of species nor such unforeseeable costs as the strife, terrorism and wars that are likely to erupt as access to water, food and other essentials becomes even more inequitable. The cost assessment also does not include the most recent evidence that the earth's "carbon sink," or ability of the environment - especially the oceans - to absorb carbon, is reaching its maximum. Concerning these new findings, Stern himself was quoted in the March 28, 2007 edition of Australia's *The Age* newspaper that "I think we are seeing early signs that some risks are bigger than the ones that we included [ie, in the Stern Report]."²⁶⁾

Boiled down to its essentials, the Stern Review shows that we can avoid a large share of the likely costs of climate change if we act immediately. Stern argues that we need to use the public sector's taxes and regulations creatively, to foster a shift away from carbon-intensive economies. In particular, Stern argues that we need to invest 1 percent of current GDP in encouraging conservation, developing new technologies, and other essentials. But much of this money would be investment as well as insurance. The Stern Review argues that we can build large markets in new technologies and products - especially green technologies - through acting against climate change.

This point makes eminent sense. Consider how Japanese cars blew away their American rivals when the price of gasoline rose in the 1970s. Japan's stringent regulations on fuel economy and the like in the wake of the 1973 oil shock paid off. That is a concrete historical example of the opportunities Stern is referring to.

The significance of this report cannot be exaggerated. It is the most comprehensive study of the economics of climate change yet undertaken. It has already revolutionized how the global community discusses the costs of the problem and its solutions. The executive summary has already been released in 8 languages other than English, including Japanese versions.

Given that there are even Japanese versions of the Stern Review's main findings (albeit not the entire, nearly 1000-page report), the relative lack of attention to it in

26) <http://www.theage.com.au/news/national/new-stern-climate-warning/2007/03/27/1174761470838.html>

Japanese circles was odd. The Japanese press ran very little on it when it came out and afterwards. Japan's comparative silence in the midst of such an historic debate is to be regretted, even though there is now some serious discussion appearing in Japanese circles.

Beyond its sobering survey of environmental damage, there were two essential lessons for Japan from the Stern Review. The first is that the tools of mainstream economics need a drastic overhaul. This lesson is especially clear in the controversy over the "discount rate" that the Stern Review uses. Essentially, the discount rate calculates the difference between the value of a unit on income - let's say 10,000 yen - in the present versus in the future. Stern values these two incomes as roughly the same, and has thus come under fire for biasing the study towards exaggerating the economic impact of future damages.

The criticisms of Stern's approach are correct, but only within the theoretical ambit of economics and its assumptions. The discount rate is a mathematical expression of the common-sense fact that the next generation can largely fend for itself so long as we supply it with some essentials, such as decent education and infrastructure. We need not starve ourselves in order to save every bit of spare income we have and leave as much as possible to the next generation. That would be no fun as well as inequitable. The next generation might very well be richer than us, if the global economy continues to grow. Their own incomes will thus be larger than ours and they would also have - through the magic of compound interest - massive bequests through the income we save and pass on to them.

One problem with the discount rate, however, is that it does not work well in the real world of global warming. The higher the rate, the lower we value future damages and the more conservative the models become about investment in the present. The critics of Stern thus argue we should do very little now and only gradually increase our efforts to develop alternative energy, conservation technology and the like. They want us to do this on the cheap so as to avoid overspending on future problems. That's the problem with discount rates: if you set the rate high enough and the time span long enough, there are points where even the extinction of the human species is not worth investing against. For moral reasons, Stern opted for a very low discount rate.

Which seems more sensible, violating theory to address reality, or ignoring reality to preserve theory? Call us biased, but we think that when you're faced with

preparing a major report on humanity's largest-ever crisis, the former is the more sensible choice.

The second lesson from the Stern Review is also moral. Stern recognizes that it is inequitable for developed countries, which grew their economies through very carbon-intensive processes, to demand that the developing countries join them and make equivalent cuts in emissions. We are unlikely to resolve this problem unless the developed countries can find a way to help the developing countries, including China, grow with far lower greenhouse gas emissions than at present. But convincing the voters of the developed countries to support such a policy will be extremely difficult. We are stuck at an impasse unless we can build a new growth regime that allows for clean development in the developing world as well as delivers benefits to the developed world. The Americans are beginning to recognize this, as we note later, and this fact should be concentrating the minds of the entire policymaking community in Japan.

The Quality Press Wake Up

Yet Japan's isolation sees it very slow to recognize how rapidly the energy and environmental debates are intertwining elsewhere, especially in America. We have left behind the "debate over global warming" days. Since last year we have noticed that the quality media are adding sentences to articles on global warming that note there is a consensus on its causes and that only a very few people argue against the anthropogenic argument. Yet Japan seems to be in a time warp. Thus the April 7, 2007 Japanese *Nikkei* wrote that until IPCC 2007 there has been a "split in international society over the scientific evidence and effects of climate change." This is a very odd, politically denatured expression to use at this stage. We have checked plenty of international and single-country polls over the years on energy and climate, and have been struck by the concern of overwhelming majorities everywhere in the developed world. This is true even of the US. The October 11, 2006 introduction to an international poll on global warming by the Chicago Council on Global Affairs made this very clear: "Only small minorities in the United States and the other countries surveyed think that evidence for global warming is too weak to justify measures that might entail economic costs."²⁷⁾

27) <http://www.worldpublicopinion.org/pipa/articles/btenvironmentra/255.php?nid=&id=&pnt=255&lb=bte>

Even the Chinese government's obstructionism at the IPCC was more about calling attention to inequities than the science per se. Precisely as Nicholas Stern argues, for China, as well as the other developing countries that it informally represents, the developed countries became rich by polluting the atmosphere. Hence they should therefore defray a measure of the costs that developing countries will have to shoulder in order to pursue vastly less carbon-intensive development than at present. The May 4, 2007 (UK) Daily Telegraph for example noted that China's interference in the IPCC reports has centred on inserting "language making plain that the world's top industrialised countries are responsible for global warming and bear the main responsibility for solving it."

And as we have seen above, there is no meaningful split among scientists. In fact, a now-famous December 4, 2004 article in the prestigious journal *Science* showed us that there is an overwhelming consensus among scientists. The article, by Naomi Oreskes, professor of the history of science at the University of California at San Diego, is titled "Beyond the Ivory Tower: The Scientific Consensus on Climate Change." Oreskes used the scientific method to determine what level of agreement there was among scientists concerning climate change. Her research showed that "despite claims sometimes made by some groups that there is not good evidence that Earth's climate is being affected by human activities, the scientific community is in overwhelming agreement that such evidence is clear and persuasive." The author surveyed 928 academic papers on climate change published between 1993 and 2003 and found that none argued against it.

But that is not all. The *Washington Post* of February 1, 2007 published an article titled "the long consensus on climate change" by the same Professor Oreskes. In the article, she notes that the scientific consensus dates back to the 1960s. Indeed, she points out that the evidence was already so strong back then that in February of 1965 then-US President Lyndon B Johnson declared in a special message to Congress that "This generation has altered the composition of the atmosphere on a global scale through . . . a steady increase in carbon dioxide from the burning of fossil fuels."²⁸⁾

The only salient split on climate change science appeared to be among Republicans in the US. Jonathan Chait, editor of the *New Republic*, wrote that the very conservative *National Review* polled Republican politicians at the federal level (ie,

28) <http://www.washingtonpost.com/wp-dyn/content/article/2007/01/31/AR2007013101808.html>

the US Congress) and found they actually grown more skeptical on “climate change.” In 2006, only 23% of Republicans apparently believed “it’s been proven beyond a reasonable doubt that the Earth is warming because of man-made problems,” but in February of 2007 that percentage had dropped to 13%. In his race to be the Republican nominee in the 2008 Presidential election, climate change believer Senator John McCain likely have a tough time appealing to his own party elite and the rest of the country.²⁹⁾

The Greening America in Back of Bush

“Global warming’s impacts on natural resources and climate systems may create the fiercest battle our world has ever seen” (Los Angeles Times, April 17, 2007) Rep. Edward J. Markey (D-Mass.), Chair, US House of Representatives, Select Committee on Energy Independence and Global Warming.

Japan’s political and economic elite grew so used to adjusting to the Bush regime’s climate change skepticism and trickery that they missed noticing how rapidly America as a whole was shifting. Consider American politics at the state level, for example.³⁰⁾ California’s Republican Governor Arnold Schwarzenegger at that point had gone very green. He had organized four other Republican and Democrat-led western states (New Mexico, Oregon, Washington and Arizona) in a carbon-trading scheme, one that explicitly acknowledged the reality of climate change. Indeed, Schwarzenegger’s initiative was going international. The premier’s office of the Canadian province of British Columbia also declared in an April 24, 2007 news release that it would join in the carbon-trading system, known officially as the “Western Regional Climate Action Initiative.”³¹⁾

Moreover, the April 16, 2007 edition of Canada’s national newspaper, *The Globe and Mail*, had already noted this development was in the works and several other Canadian provinces are “forging their own ties to U.S. states in the pursuit of a cross-border emissions credit market. They have either signed agreements or are in

29) <http://articles.latimes.com/2007/mar/25/opinion/op-chait25>

30) An archive of state actions is available at :

http://www.pewclimate.org/what_s_being_done/in_the_states/

31) http://www2.news.gov.bc.ca/news_releases_2005-2009/2007OTP0053-000509.htm

talks with two systems that are developing in the United States, one on the East Coast and one in the West, that are also collaborating with each other.”

Carbon trading is, of course, market-based and a poor substitute for the carbon taxes and regulations that Stern and other recognize are essential. The March 12, 2007 edition of *Newsweek* rightly derided emissions trading as “the carbon folly” and at best a marginal part of an overall set of solutions.³²⁾ *Newsweek* is a mass-market weekly. That it is already critical of such schemes is an indication of how fast the American debate is shifting. Politicians are being forced to act in order to keep up.

Indeed, Japanese policymakers do not appear to understand that by 2006 the Bush regime had become far from America’s mainstream on this issue (as well as the closely related energy policy). Prime Minister Abe Shinzo visited the United States in later April of 2007 and made a joint announcement of environmental action with Bush, as the April 28, 2007 Japanese *Nikkei* noted. But true to the Bush regime’s style, and in a continuation of the Koizumi approach, the policy had no content. There were no targets and no meaningful mechanisms of enforcing anything. This is a clear effort to use the climate change issue in order to enhance soft power (especially important in the wake of Abe’s problematic statements on “comfort women” and so on). But the risk was that Japan would remain stuck in the same trap that the Koizumi people fell into.

Continued complacency in Japan is an especially serious problem now because America is in such dynamic motion. Even back in the April 9, 2007 *Business Week*, it was noted that America’s university campuses are greening, and that global warming appears set to spark the “next big youth movement.” This is hardly a surprise, since the youth of today and their children will inherit a veritable hell on earth unless serious action is taken now. The lack of youth activism on this issue, in Japan as well as elsewhere, has been the real surprise.

Even more important, American society’s “trinity of industry, military and the church” are calling for controls on carbon dioxide emissions as well as other action, as one author noted in an April 20, 2007 article on America’s “green stampede.”³³⁾ We saw earlier how industry wants rules. The churches do too, since they have woken up to the fearsome risks of laissez-faire policies on global warming.

The military’s concern is also particularly notable, and is intimately tied to

32) <http://www.newsweek.com/id/36517>

33) <http://www.bioedonline.org/news/news.cfm?art=3280>

energy and national security issues. For example, on May 3, 2007 business and military leaders grouped in Securing America's Future Energy (SAFE) released a major study that they commissioned through the University of Maryland. The study argues that energy efficiency increases advocated by SAFE would lead to higher incomes, more jobs and enhance national security.³⁴⁾

And the day before, on May 2, the US House Intelligence Committee ordered the National Intelligence Council to produce a National Intelligence Estimate specifically on climate change. The estimate will address the political, social, agricultural and economic risks associated with climate change over the coming 30 years. Republican members of the committee were largely against the measure, and one of them even tried to prohibit it with an amendment that forbid "environmental spying." But the effort to block the assessment failed.

This failure to block the assessment was no real surprise, and not just because the Democrats hold the majority. The Americans can see others acting, or at least preparing to. For example, the UK Ministry of Defence had already uploaded to its website a study of climate and other risks on January 1 of 2007. The study was by its Development, Concepts and Doctrine Centre (DCDC), and is titled *Global Strategic Trends 2007 2036*. Among other things, it warns that climate changes "will be intensified and accelerated by the diminution of natural carbon-capture processes (such as forests and marine life) and the reduction of the polar ice-caps." These changes are expected to lead to catastrophic events and greatly exacerbated security problems.³⁵⁾

Moreover, the accelerating momentum of American military concern was evident in the non-profit Centre for Naval Analysis (CAN Corporation) April 16, 2007, release of a study on "National Security and the Threat of Climate Change." This study is very important because it was supervised by a Military Advisory Group, composed of 11 former high-ranking generals and admirals from all branches of the US military. The chair of this Group was, for example, former US Army Chief of Staff General Gordon Sullivan. Also on the Board was retired Marine Corps General Anthony Zinni. Zinni emphasized that climate change was a major security threat: We will pay for this one way or another...We will pay to reduce greenhouse gas emissions today, and we'll have to take an economic hit of some kind. Or, we will pay the price later in

34) <http://www.secureenergy.org/>

35) <http://www.energybulletin.net/26566.html>

military terms. And that will involve human lives. There will be a human toll.”³⁶⁾

Behold: The Green Bush!

Even Bush himself is green. I mean that in all sincerity, not in the breathless praise of Koizumi, searching to legitimate his June 2001 political rollover on Kyoto. Bush is green in his own little world, but is dead set against government initiatives. Perhaps it is a Texas-style “uchi-soto” kind of thinking. Bush’s former speechwriter, the staunchly conservative Canadian David Frum, visited Bush’s ranch in Crawford Texas and wrote of it. At the Bush family ranch there are geothermal heat pumps and a 95,000 litre underground cistern to collect rainwater. Frum’s 2003 book *The Right Man* also notes that:

“I once made the mistake of suggesting to Bush that he use the phrase *cheap energy* to describe the aims of his energy policy. He gave me a sharp, squinting look, as if he were trying to decide whether I was the stupidest person he’d heard from all day or only one of the top five. Cheap energy, he answered, was how we had got into this mess. Every year from the early 1970s to the mid 1990s, American cars burned less and less oil per mile travelled. Then in about 1995 that progress stopped. Why? He answered his own question: because of the gas-guzzling SUV. And what had made the SUV possible? This time I answered. ‘Um, cheap energy?’ He nodded at me. Dismissed.”³⁷⁾

In other words, Bush himself was well aware of the negative externalities of energy. But he was the representative of America’s incumbent industries in the oil age. Perhaps his regime will mark the twilight of America’s oil age. Everyone knows that the moment Bush leaves office, on January 20 of 2009, climate change and alternative energy will become predominant issues in American politics. As Philip Clapp, head of America’s non-profit and non-partisan National Environmental Trust, told the September 23, 2006 *San Francisco Chronicle*, “George Bush’s ‘just say no’ policy on global warming is political history...Every senator and member of the House knows that at midnight on the day George Bush leaves office, a new administration, whether it’s Republican or Democratic, will be returning to the international negotiating table on global warming.”

36) <http://www.ens-newswire.com/ens/apr2007/2007-04-16-05.asp>

37) The quote is available online at : http://www.lrb.co.uk/v29/n06/lanc01_.html

Since then, as we have seen, the Democrats took control of Congress in the 2006 midterm elections and began turning over lots of rocks. Moreover, Barack Obama won the presidential election on November 4, 2008, and is now prepared to implement a “green new deal” whose content the global environmental community eagerly awaits. Combined with the growing pressure from business, the military and other sectors of American society, the present resembles nothing so much as an enormous, coiled spring ready to propel us into another industrial revolution.

Japan, however, appears to be stuck in the mud. The September, 2008, installation of Aso Taro as Prime Minister has brought uncertainty on all fronts, including environmental policy. As of this writing (December 2008), the Aso regime appears too weak to take any bold initiatives on energy and the environment. So the legacy of the Koizumi years and afterwards would appear to be yet more waiting on Washington’s lead. To lift a line from TS Eliot, “ridiculous the waste sad time stretching before and after.”