

EPA: The Administration's High Risk but Pivotal Climate Gamble

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EXECUTIVE SUMMARY

This paper explores two topics. The first explains why EPA plays a pivotal role in the worldwide climate change controversy, what should be done about it, and what longer term reforms are needed to prevent similar attempts to subvert public policy on the basis of bad science. The second topic concerns the extreme weakness of the basic non-science assumptions of the warmist narrative which are too often ignored by opponents but are at least as important as the scientific assumptions. The first topic is crucial to understanding the current status of the climate change battle; the second suggests one of the reasons why the EPA gambit is particularly high risk since the warmist agenda is highly unlikely to achieve its goals even if it were permitted to do so.

EPA

The larger world climate change battle now hinges largely on the fate of the efforts by the US EPA to control some greenhouse gases. The rest of world will not commit economic suicide by agreeing to major greenhouse gas emission cuts unless the US does. On the other hand, the Senate will not approve Cap and Tax; so it all hinges on EPA. If EPA is stopped in its determination to impose carbon rationing, the effort to roll back the industrial revolution can and will be stopped since it is the last real possibility that the US might join some other developed countries in the effort. If EPA is not stopped, the world may well witness an attempt to impose the current green agenda. The Obama Administration will apparently ride the Supreme Court decision until its dying days, regardless of the resulting political damage, which may be severe.

In addition to the continuing importance of halting the implementation of the GHG control schemes, the time has come to start defining what policy and administrative changes might be advisable. What I propose is a series of longer-term reforms needed to decrease the chances that bad regulations based on bad science such as those now being proposed for controlling GHGs will be repeated in the future in the US in other regulatory areas. These include the following in the case of EPA:

- * Insulate EPA from political control
- * Require that EPA MUST carry out independent analyses and not use any other assessments
- * Remove financial incentives for EPA managers to follow the Administration
- * Periodically review and reassess major EPA regulations not already subject to review requirement
- * Require that EPA use the scientific method in judging the merits of scientific hypotheses.

The following reforms would also appear desirable with regard to other agencies:

- * End the new National Climate Service
- * Split responsibility for climatic data gathering and climatic data interpretation.
- * Get the Federal Government and state legislatures out of energy choice decisions; limit role to strictly R&D and conventional pollution control; no subsidies/taxes/preferences unless justified to bring prices into line with full social costs; so no renewable portfolio standards (RPSs)

- * Rethink how Federal R&D decisions are made so that there is broad diversity of hypotheses researched and the process cannot be captured by groups advocating a single hypothesis in the future
- * End all US funding of UN climate change efforts and aid to less developed countries based on climate change criteria.

Critical Assumptions

Current scrutiny of the alarmist/warmist positions quite deservedly centers primarily on the scientific integrity of the UN/IPCC reports, which in the United States may be crucial in the question of whether EPA acted in accordance with EPA regulations and applicable laws in determining that GHGs endanger public health and welfare. It is important, however, not to lose sight that the larger warmist view of the world makes a long series of crucial assumptions starting with the science and ending with the implementation of their proposed solution. This larger view of their assumptions suggests that some of the other assumptions are even less well grounded in reality than the ill-supported conclusions currently being discussed concerning the IPCC reports.

The publicized goal of the AGW alarmists/warmists and the European Union is to prevent more than a 2°C increase in global temperatures above preindustrial levels by reducing GHG emissions. They appear to have made a number of critical assumptions in order to arrive at this goal and their approach to achieving it, including the following:

1. Significant global warming is taking place and will take place in the future
2. This warming is primarily due to increasing levels of greenhouse gases (GHGs) in the atmosphere
3. These increasing GHG levels are primarily due to human activity in releasing GHGs.
4. It is realistic to rapidly and drastically reduce emissions of GHGs.
5. A United Nations consensus can be reached on a new global treaty to reduce GHG emissions
6. But to obtain a consensus it would desirable and feasible for developed countries to pay large amounts to the developing countries
7. If a consensus should be reached, each country would actually implement whatever it may agree to
8. These actually implemented reductions would reduce global warming sufficiently so as to avoid a 2°C increase in global temperatures

The first three have been widely examined and criticized by many in the skeptic community. The last five, however, may even be more dubious, and deserve greater attention in my view. Failure of any of these assumptions calls into question the entire warmist narrative, with or without the EPA gambit.

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List of Acronyms

AGW	Anthropogenic global warming
AR4	Fourth Assessment Report of the IPCC
°C	Degrees centigrade
CAA	Clean Air Act
Cap and Trade bill	Congressional bills placing a cap on emissions and allowing for trading of emission permits in a marketplace; example: the Waxman-Markey bill
CCSP	(US) Climate Change Science Program
CFC	Chlorofluorocarbon
CO ₂	Carbon Dioxide
CWA	Clean Water Act
EPA	(US) Environmental Protection Agency
GHG	Non-water vapor greenhouse gas
IPCC	(UN) Intergovernmental Panel on Climate Change
NIPCC	Nongovernmental International Panel on Climate Change
NRC	National Research Council
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
USEPA	United States Environmental Protection Agency
USGCRP	United States Global Change Research Program

1. Introduction

This paper covers two topics. The first explains why EPA plays a pivotal role in the worldwide climate change controversy, what might usefully be done about it, and what longer-term reforms are needed to prevent similar attempts to subvert public policy in the name of science. The second topic concerns the extreme weakness of the basic non-science assumptions of the warmist narrative, which too often are ignored by opponents but are at least as important as the scientific assumptions. The first topic is crucial to understanding the current status of the climate change battle; the second lays out important relatively ignored arguments why the warmist agenda could not achieve its goals even if it were tried.

2. The EPA's/Administration's Climate Gambit: How to Cope

2.1 Why EPA Plays the Pivotal Role in the World AGW GHG Control Effort

The United States currently occupies the pivotal role in determining the outcome of the attempted worldwide attempt to roll back the industrial revolution by radically restricting emissions of greenhouse gases except water vapor. In my view, most of the world will not commit economic suicide by agreeing to roll back non-water vapor GHG emissions (henceforth GHGs) unless the US also takes actions with similar results. The anthropogenic global warming (AGW) theology may appear to some to be powerful, but the critical need for jobs and competitive advantage will in the end win out if the other developed nations are forced to compete with the US if it does not have similar controls and they do. And with one exception, this appears to be the current situation since Senator Inhofe and others have assured everyone that the Senate will not pass a Cap and Trade bill. That exception is the possibility that the USEPA will successfully implement the equivalent restrictions on GHGs using the existing Clean Air Act and other environmental statutes.

The larger world climate change battle now hinges largely on the fate of the efforts by the USEPA to control some greenhouse gases. The rest of world will not commit economic suicide by agreeing to major greenhouse gas emission cuts unless the US does. On the other hand, the Senate will not approve Cap and Trade (Tax); so it all hinges on EPA. If EPA is stopped in its determination to impose carbon rationing, the effort to roll back the industrial revolution can and will be stopped since it is the last realistic possibility that the US might join some other developed countries in the effort. If EPA is not stopped, the world may well witness an attempt to impose the current green agenda. The Obama Administration will apparently ride the Supreme Court decision until its dying days, regardless of the resulting political damage, which may be severe.

For this reason, I believe that EPA needs to be skeptic/realist concern number one. This means that an extra hour of effort to delay/stop EPA climate-change control inspired regulations is likely to be worth more than an extra hour spent on anything else. Defeating EPA's attempts to control emissions of GHGs and related efforts is going to be very difficult but also very crucial in the larger battle. I am optimistic, but I cannot tell you exactly how this will occur. But thanks to the Clean Air Act and particularly the Supreme Court's interpretation of it EPA currently has most of the bureaucratic/legal cards and the skeptic community needs to home in on its weaknesses. For example, EPA dismisses the NIPCC report (Idso and Singer, 2009) because they claim that it does not contain an "adequate" peer review process (see Section 2.4.1.5 below for a full discussion). This is absurd, of course, but it does suggest the lengths to which the Obama EPA is willing to go.

2.2 How the Supreme Court Gave EPA This Role in the US and Thus the World

Congress has granted sweeping regulatory powers to EPA on the assumption that it would be responsibly used. This has taken many years and was based on a long record of what I believe has been widely perceived to be careful regulation generally where needed. Then the traditionally most conservative US institution, the Supreme Court, reinterpreted the Clean Air Act as a basis for regulating GHGs. When I first heard of what the Obama Administration had in

mind in early March, 2009, I was immediately convinced of the crucial role EPA was likely to play and did what I could to bring the scientific problems with the AGW theology to the attention of the Agency by preparing a 100 page set of comments on the draft technical support document for the endangerment finding (Carlin, 2009). As has been widely reported, the CAA is much less than an ideal means for regulating GHGs and this will hopefully create future legal problems for the Agency.

I am personally convinced that the Administration will not voluntarily give up this lone area of leverage through fiat regulation by EPA, perhaps because it is committed to larger global effort and will do anything to promote the worldwide AGW cause. The political risks of doing so appear to me to be large, particularly in the fall elections, but are apparently regarded as secondary by the Administration to their other goals.

2.3 Ways to Meet Short-term EPA Problem

So if the Administration is unlikely to change course despite the obvious political advantages of doing so, the options would appear to be:

Veto Endangerment Finding under Congressional Review Act. Tough to get majority in current House.

Revise Clean Act to specifically exclude regulation of greenhouse gases for climate change control and CWA for ocean acidification. Requires Presidential signature or Congressional override.

Preclude any funding for regulation of greenhouse gases for climate change control or water discharges to “prevent” ocean acidification. Requires majority vote in both houses and Presidential signature or override

Overturn endangerment finding in courts

Wait until Obama Administration leaves office and hope that new administration will overturn GHG regulations. Considerable damage may be done in meantime, however.

For the reasons outlined, EPA is so crucial to defeating the worldwide AGW GHG control scheme that all these approaches need to be pursued in my view.

2.4 Many Longer-term Fixes Required to Avoid Repeat

Previous administrations have generally tried to minimize adverse economic and political effects of regulations. The Obama Administration priority appears to be the opposite—to use EPA to change public and/or Congressional behavior regardless of the political or economic costs. The Administration can and has determined “correct” science at the Presidential level; diversity of opinion is not in reality acceptable. The Administration has powerful means to enforce conformity in the bureaucracy. The question is how can climate change or similar risks of basing major regulations on bad science be reduced now and in future? This appears to be something that the authors of the basic US environmental laws did not really contemplate.

Longer-term reforms are even more difficult than the short-term reforms discussed in the previous section, but must be faced. Given the huge expenditure of skeptic effort in recent years it would be a shame if the same effort had to be mounted the next time a regulatory control scheme occurs with no real scientific basis. Happily we will hopefully escape huge damage this

time thanks to all of this effort, but we might not be so lucky next time. It is hard to raise longer-term problems in the heat of a short-term battle, but it is certainly time to start. The next two subsections explain what I believe needs to be done.

The longer-term problems are deep-seated and difficult to understand let alone resolve. The problem is that big government science has lost touch with the very essence of science—the comparison of hypotheses to explain the real world with data which would verify or deny their validity. Several commentators have discussed aspects of this problem, including Richard Lindzen¹ and Arnold Robinson.² Lindzen has summarized the problem as follows:³

In brief, we have the new paradigm where simulation and programs have replaced theory and observation, where government largely determines the nature of scientific activity, and where the primary role of professional societies is the lobbying of the government for special advantage.

2.4.1 Reforms Needed at EPA

2.4.1.1 Insulate EPA from Political Control

EPA is under the direct control of the Administration, unlike some other regulatory agencies, which are under a variety of bi-partisan approaches. This would be a major change, but may be necessary to restore confidence in EPA.

2.4.1.2 Require that EPA MUST Carry Out Independent Analyses and Not Use Any Other Assessment

EPA has reached its GHG endangerment finding by relying primarily on the UN IPCC reports and other reports based on them without any independent review thereof. This saved considerable time and probably controversy, but resulted in no real analysis of the scientific issues.

2.4.1.3 Reduce incentives for EPA managers to Follow Administration

Besides the normal bureaucratic controls, the pay of all EPA executives and senior analysts are directly determined by EPA management within certain boundaries. This is unlikely to lead to independent action or thought by these crucial civil service employees.

2.4.1.4 Periodically Review and Reassess Major EPA Regulations Not Already Subject to Review Requirement

There is currently no process in place to review the continuing scientific justifications for some major classes of pollutants. Given the changing science for a number of these regulations, this results in the possibility that regulatory actions will continue in place when they may no longer be needed or when stronger action is justified. Perhaps the place to start is the regulations concerning stratospheric chlorofluorocarbon control.

2.4.1.5 Require that EPA Use the Scientific Method

EPA claims to select warmist GHG science primarily on the basis of alleged peer review of assessments. Yet one thing that is clear is that there are numerous cases where the IPCC peer review requirement was not implemented as written (Laframboise, 2010). Yet EPA says that

1 Lindzen, 2008.

2 Robinson, 2010.

3 Lindzen, 2008, p. 4.

these are of no importance because nothing crucial to the AGW hypothesis has been questioned. So EPA wants it both ways. It wants to select on the basis of peer review, then argue that peer review failures are of no importance because substance was not compromised by the failures. Obviously EPA should have done its own analysis, selected which studies to use on the basis of which correspond with observable reality, and performed peer review using reviewers from all spectra of opinion, not just those that support their desired outcome.

Given the the apparent death of cap and trade legislation in the US Senate, at least for this Congress, the short-term outcome of the US debate on action that allegedly might reduce climate change may rest primarily on what the USEPA manages to actually do. So it is of some importance what criteria EPA claims to be using in determining the scientific merits of its endangerment finding. In USEPA's view the UN IPCC reports and other assessments based on it are so satisfactory an assesement of current climate science that no independent EPA analysis was necessary, primarily because of the IPCC's "rigorous" policy on peer review. EPA cites this review policy as the reason it accepts these reports rather than others, such as the NIPCC report.⁴ Recent reports show that as actually carried out the UN IPCC AR4 assessment was much less than rigorous in the application of its peer review guidelines (Laframboise, 2010). however. Lost in this exchange, however, is whether the yardsticks being used by the UN and the EPA are reasonable. Both organizations appear to assume that peer review is the important characteristic of valid science included in scientific assessment reports.

I maintain, on the contrary, that the important characteristic should be how well the hypotheses proposed by the UN IPCC correspond with real world evidence.⁵ It is only this crucial correspondence that determines the scientific validity of a hypothesis, not how many or how distinguished the reviewers may be who agree with the relevant hypotheses. This should be evident since any widely held scientific view (such as that the Earth is flat some centuries ago) would have easily qualified as valid science using a peer review standard since the supporters could easily have gotten a large number of favorable reviews of their hypothesis. This is what has happened in the case of the AGW hypothesis. There are enough global warming supporters among climate scientists so that with a little careful selection favorable peer reviews can be obtained for any desired warmist hypothesis. Hence such views can pass the peer review standard whether a hypothesis really stands up to comparisons with real world data or not.

For example, the EPA claims⁶ that the 880 page NIPCC report stands in sharp contrast to the IPCC and related reports:

“The [NIPCC] organization does not appear to have established any procedures for author selection and provides no evidence that a transparent and open public or expert review was conducted. Thus, the NIPCC's approach stands in sharp contrast to the clear, transparent, and open procedures of the IPCC, CCSP, USGCRP, and NRC.”

So although there is some discussion of the arguments raised by the NIPCC report, no real effort appears to have been made to consider using the NIPCC report at least in part on the basis of whether the report had “adequate” peer-review guidelines. According to the EPA, only the IPCC and similar reports including such peer review meet EPA's “exacting” review standards. How accurate or how closely the NIPCC and other skeptic reports correspond with real world

⁴ Idso and Singer, 2009.

⁵ Carlin, 2009a.

⁶ In Response 1-12 to the public comments on the EPA proposed endangerment finding, USEPA, 2009.

evidence appears not to be of any real importance to the EPA—just how comprehensive the stated review process was supposed to be. Yet when deviations from these standards are detailed EPA maintains that the IPCC conclusions would not have been materially affected rather than admitting that their expressed confidence in the UN procedures was misplaced. This is also an argument that the substantive scientific merits of the non-IPCC assessments do matter, but only when the procedural aspects have not been comprehensively implemented. The reverse should be the case.

The Purposes of Peer Review

The basis for the underlying argument is what is fundamental to the scientific method: Correspondence with real world data or procedural review requirements. In examining this issue it is useful to recall the history of scientific peer review. It was basically introduced so as to decide which papers submitted to printed journals should be included (primarily for the purpose of saving then precious journal space) and whether there might be improvements that could be made in those selected,. This may have actually been useful in the days when journals were of limited size based on their printing and mailing costs.

Peer review subsequently served an added purpose—to provide a basis for discriminating between the output of various authors/professors and thus providing a basis for conferring academic tenure on some but not on others. The second purpose is still a rational argument for using peer review, but the first purpose is technologically obsolete since Web publication of added papers is very low cost and may be almost free. Use of Web-based journals has the added advantage that they are normally free to all users rather than limited to the select few who can afford often very expensive subscriptions. And peer review of papers for journal publication has many very important disadvantages, of which the most important is that it often prevents publication of non-conventional ideas that may have great merit. This appears to have been too often the case with regard to the consideration of skeptic contributions to climate science in recent years.

So the extension of journal-based peer review to determining the scientific merit of competing hypotheses is a very important policy issue since it may lead to reducing the importance of comparisons of competing scientific hypotheses against real world data. This is exactly what appears to have happened in the case of the AGW hypothesis of global warming. In fact, warmists have widely cited better peer review as an important reason to support their hypothesis; according to the Climategate emails, leading warmist scientists actively conspired to prevent skeptic-oriented papers from being published in major climate-related journals.

The Fundamental Issue: How Should Scientific Hypotheses Be Judged?

All this highlights the fundamental issue of whether scientific hypotheses should be judged on the basis of whether they have appeared in peer-reviewed journal publications or on the basis of correspondence with observed real world data. I believe very strongly that it is the latter rather than the former that should be used. One important reason is that peer-review is subject to the same “group think” that science should seek to avoid in order to be objective and useful. And that is exactly what has happened in the case of the AGW hypothesis. Despite the absence of any relevant real world data comparisons (Carlin, 2009a) to support their case, warmists try to use the widespread support (the so-called “consensus”) among sympathetic scientists for their hypothesis to argue that it should be accepted. Obviously if this was the standard, we would still

believe that the Earth was flat and that the Earth was the center of the universe, to mention just two widely supported hypotheses disproved by their lack of correspondence with real world data.

It is very unfortunate and may even prove disastrous that EPA and other environmental regulatory institutions appear to have made peer review procedures of much more importance than correspondence with real world data. Scientific assessments need to determine the correspondence between hypotheses on the basis of real world data, not relative “peer review” procedures. This needs to be corrected before immense damage is done to our crucial criteria for judging scientific hypotheses and to our economy as a result of using faulty science for public policy purposes.

2.4.2 Reforms Needed at Other Governmental Agencies

2.4.2.1 End National Climate Service

The last thing that is needed is for the Federal Government to speak with one voice on climate science. Science advances most when there are multiple hypotheses that can be compared to see which ones best explain available observations.

2.4.2.2 Split Responsibility for Climatic Data Gathering and Climatic Data Interpretation

There is no other approach that will remove the risk that data interpreters might try to change the data to fit their interpretation, as some have argued.⁷

2.4.2.3 Get the Federal Government and State Legislatures Out of the Choice of Energy Sources

Their roles should be limited to strictly R&D and conventional pollution control. No subsidies/taxes/preferences should be imposed unless justified to bring prices into line with full social costs. This means, for example, no renewable portfolio standards (RPSs). Clearly energy-related bills like Waxman-Markey will do nothing to increase the efficiency of US energy production. For additional general discussion see Carlin (2009c). For the application of full social cost pricing to energy prices see Viscusi et al. (1994).

2.4.2.4 Rethink How Federal R&D Decisions Are Made So That the Process Cannot Be Captured by Narrow Viewpoints In Future

In hindsight it is increasingly clear that the warmist GHG control effort has been largely funded by government itself. Government often uses a peer review approach sometimes even involving current grantees or those sympathetic to current funding trends to decide how to direct new research funding in the same area. Rapid progress in the sciences is dependent on the availability and testing of a wide variety of hypotheses, which is less likely to happen when research proposals are funded on the basis of peer review. What is needed is a broad set of hypotheses to be explored. This may be one reason that the climate research program became trapped in a narrow and ultimately unproductive area. This is a process that feeds upon itself and may have resulted in what we now see.

⁷ D'Aleo and Watts, 2010.

2.4.2.5 Stop all US funding of UN climate Change Control Efforts and Aid to Less Developed Countries Based on Climate Change Criteria

This would probably be the most effective reform of all, assuming that a way can be found for the US to selectively defund this particular UN effort. It is becoming increasingly clear the UN is not capable of preparing impartial assessment reports that use the scientific method to determine scientific validity. So the best course would seem to be to terminate all US support for it rather than try to reform it.

3. Need to Broaden Review of the Warmist Narrative to the Very Weak Less Scientific Areas

One of the reasons that the EPA gambit is particularly high risk is that the major largely non-scientific basic assumptions made by the general AGW/alarmist/warmist position are particularly weak—probably even weaker than the major scientific ones. Most current realist/skeptic attention has been quite deservedly centered primarily on the scientific integrity of the UN/IPCC reports, which in the United States may be crucial in the question of whether EPA acted in accordance with EPA regulations and US law in determining that GHGs endanger public health and welfare. It is important, however, not to lose sight that the larger AGW/warmist view of the world makes a long series of crucial assumptions starting with the science and ending with the implementation of their proposed solution. This larger view of their assumptions suggests that some of the other assumptions are even less well grounded in reality than the ill-supported conclusions currently being discussed concerning the IPCC reports.

The publicized goal of the AGW alarmists/warmists and the European Union is to prevent more than a 2°C increase in global temperatures above preindustrial levels by reducing GHG emissions. They appear to have made a number of critical assumptions in order to arrive at this goal and their approach to achieving it, including the following:

- 3.1.1 Significant global warming is taking place and will take place in the future.
- 3.1.2 This warming is primarily due to increasing levels of greenhouse gases (GHGs) in the atmosphere.
- 3.1.3 These increasing GHG levels are primarily due to human activity in releasing GHGs.
- 3.2.1 It is realistic to rapidly and drastically reduce emissions of GHGs.
- 3.2.2 A United Nations consensus can be reached on a new global treaty to reduce GHG emissions.
- 3.2.3 But to obtain a consensus it would be desirable and feasible for developed countries to pay large amounts to the developing countries.
- 3.2.4 If a consensus should be reached, each country would actually implement whatever it may agree to.
- 3.2.5 These actually implemented reductions would reduce global warming sufficiently so as to avoid a 2°C increase in global temperatures.

Each of these assumptions appears to be essential for the overall warmist narrative if they are to make a well-rounded case that their solution might have credibility. The first three are related to the IPCC science conclusions and therefore the EPA endangerment finding. The remainder, however, are not really discussed in the EPA endangerment finding since they involve potential regulatory action. But they may be relevant to future EPA rulemaking and are very relevant to the real world viability of the warmist narrative as a whole.

3.1 The Three Widely Discussed Warmist Scientific Assumptions

3.1.1 There Will Be Significant Warming

It appears clear that there has been significant warming since the end of the Little Ice Age and during the 1930s (well before any significant impact of fossil fuel use is likely). There also was

some modest warming in 1998, which shows no apparent relation to changes in CO₂ levels.⁸ Otherwise it is difficult to make the case for significant warming in the last 70 years.

There is increasing evidence that the alleged warming in the 1980s and early 1990s may be more the result of the urban heat island effect and attempts to manipulate the ground-based station data than it is of actual temperature increases. The satellite temperature data (which started in 1978) shows a significant increase only in 1998 leaving aside periodic oscillations probably related to ENSO and very recent increases.⁹

Now as to the future, the principal argument advanced for higher temperatures is that a number of computer models used by the UN IPCC, which have all used similar assumptions, all show increases for the remainder of this century. But these models reflect the assumptions used in constructing them rather than having any actual predictive power.¹⁰ If this first assumption is incorrect the later assumptions should make little difference since there will be no alleged problem to solve. I give this assumption a chance of being correct a generous 2 out of 10 or 20% because of our limited understanding of climate despite the lack of any real evidence for the warmist view.

3.1.2 Alleged Warming Primarily Due to Rising GHG Levels

There is very little empirical evidence for rising GHG levels as the primary cause for global warming. Ice core data suggests that CO₂ levels follow temperatures rather than the other way around. In fact, the all-important scientific tests of this hypothesis show that increases in GHG levels are not a significant cause of warming (Carlin, 2009a). A new study (Marsh, 2009) suggests the same thing. There is even a theoretical hypothesis by Miskolczi that argues that the Earth simply reduces atmospheric water vapor (a more important greenhouse gas) to offset higher GHG levels. If correct (and it at least has a real world empirical basis, unlike the AGW hypothesis), this means that increases in GHG levels would have no effect on global temperatures! So it seems reasonable to give this assumption a 1 out of 10.

3.1.3 Rising Atmospheric GHG Levels Primarily Due to Human Releases of GHGs

There is little doubt that atmospheric GHG levels are increasing, but whether human-caused emissions are the primary cause is doubtful but more uncertain than assumption (6.1). Rather, the increasing GHG levels may be primarily due to increasing ocean temperatures over hundreds of years since water cannot absorb as much CO₂ at higher temperatures. This appears to be a major scientific uncertainty, so I propose to assign this assumption a 3 out of 10.

3.2 The Five Even More Dubious Largely Non-scientific Warmist Assumptions

3.2.1 It Is Realistic to Rapidly and Drastically Reduce Emissions of GHGs

Warmists assume that GHG emission reductions are the solution to (3.1.1), (3.1.2), and (3.1.3), but this is far from obvious. They generally propose reductions in CO₂ emissions of about 80% by 2050, often compared to 1990. Taking account of population growth and increases in energy

⁸ Carlin, 2009b.

⁹ See Carlin, 2009b and D'Aleo and Watts, 2010, for a more detailed discussion.

¹⁰ Carlin, 2009, Section 1.7.

use since 1990, the reductions “needed” per person would be almost 90%.¹¹ Given the rapid spread of new energy using technology such as computers, server farms, and cell phones, this appears more than unlikely.

In reality, most experience to date has been that in political jurisdictions where the most serious energy efficiency efforts have been made, the “best” that has been achieved is that GHG emissions have been held steady because the emissions reductions have been balanced out by increases brought about by demand for increased use by increasing urban populations.¹² Finally, analysis¹³ suggests that various geoengineering solutions such as stratospheric solar radiation management would much more reliably achieve cooling at a small fraction of the huge costs of reducing GHG emissions. So I’ll give this assumption a generous 1 in 10 chance of being correct.

3.2.2 A New Binding International Treaty Can Be Reached to Reduce GHG Emissions

Since even countries with large emissions could theoretically have only a small effect on global emissions and emissions reductions by one country would disadvantage it economically compared to those that do not reduce them, the only way to reduce emissions (assuming that this could actually be done) effectively would be for most large emitting countries to enter into a binding treaty to reduce emissions. This may require the intervention of a world body such as the United Nations. But the Copenhagen Conference and those leading up to it strongly suggest that a new UN consensus would be very difficult to reach, at best. The UN did earlier reach consensus on both the UNFCCC and on the Kyoto Protocol to it, but there has been no evidence that a new consensus agreement is even possible. So I’ll give this assumption a very generous 1 out of 10.

3.2.3 Funding Can Be Found to “Buy” Support/”Reimburse” Less Developed Countries

Assuming that a new consensus could be reached, it is very likely that it would include large payments from developed to developing countries. Many less developed countries have suggested that they would be willing to concur on a new accord only if the developed countries pay them quite large sums presumably for the expenses they might incur for reducing emissions and/or the damages they may have incurred by the higher temperatures allegedly resulting from GHG emissions from the developed countries.

The principal problem is that even if developed countries should agree philosophically with this position, they must find the funding for these payments. This may not be very popular with voters in developed countries; it is certainly not in the United States. Indications so far are that most of the money so far promised may come from existing foreign aid budgets, which means that total foreign aid would probably change very little, which is consistent with the idea that the voters in developed countries are unlikely to approve significantly higher foreign aid levels. The leading proposal considered at the Copenhagen Climate Conference was that the funds would be allocated by the UN, which may not reassure voters in developed countries who would have to foot the bill. So I’ll give this assumption a generous 1 in 10.

¹¹ See Carlin, 2009, p. 721.

¹² For added discussion, see Carlin, 2008, pp. 721-5.

¹³ For example, see Carlin, 2007 and 2008.

3.2.4 Most Major Emitters Would Actually Carry Out Whatever GHG Reductions They Might Agree to

Voluntary international agreements do not have a very good record of actually being implemented. Witness the Kellogg-Briand Treaty renouncing war as an instrument of national policy in 1928, or more to the point, the Kyoto Protocol negotiated in 1997. Neither one was/is being implemented in any serious way.¹⁴ But without effective implementation there will certainly be little reduction in GHG emissions, and, even if the above assumptions should be correct, in global temperatures. So give this assumption a generous 1 in 10.

3.2.5 Proposed Actual Reductions in GHG Emissions Would Achieve the 2°C Goal

Besides the ability to predict climate decades in advance, this assumption assumes that we know the so-called climate sensitivity factor, which relates changes in temperature to a doubling of CO₂ levels. Unfortunately this is one of the most controversial issues in climate science and is not known with even moderate confidence. Hence any claims that a given change in emissions will result in a particular increase in temperatures cannot be ascertained. Thus it is not possible to know what change in global temperatures might result from any given change in GHG emissions. Finally, it can be shown¹⁵ that if the IPCC assumptions and data were all correct that the 2°C goal could not be achieved using this approach. So I give this assumption a 1 in 10 probability.

Taken together, the odds that all eight of these crucial warmist assumptions would prove to be correct appears to be close to zero. There is no rational expectation that assumption (3.2.5), their ultimate objective, would actually be achieved if the world actually tried to implement the warmist narrative. The last five assumptions are particularly indefensible, but are receiving less attention than the first three. This Section explains why each of these critical assumptions are very dubious and why the assumption that taken together they are all correct is not reasonable.

Despite the dismal prospects that all these assumptions are correct, many prominent politicians (including the Obama Administration), US mainstream media, and many academics continue to pursue the warmist narrative. Even if the prospects for each assumption were magically doubled, it remains unclear why rational people would support more than one of the warmist assumptions and particularly the overall narrative.

¹⁴ Carlin, 2008, pp. 725-6.

¹⁵ Carlin, 2008, pp. 712-6.

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