

Web home page: http://www.climatescience.org.nz
Twitter: @NZClimatScience

presents

The Greatly Exaggerated Threat of Man-made Warming

How United Nations agencies have fooled the world

by

John McLean PhD

(c) John McLean 2020

This document can be freely distributed only if it is not altered in any way.

Thombso
Thanks: My thanks to William Kininmonth (Australia) and Tom Sheahen (USA) for assistance with the atmospheric physics described in chapter 3, and to my colleagues in the New Zealand Climate Science Coalition for their valuable feedback on preliminary drafts of this essay. Any mistakes that remain are mine alone.
ii

Summary

Climate activists would have us believe that man-made warming is a fact and it's serious. After reading the various documentation of meetings leading up to the creation of the Intergovernmental Panel on Climate Change (IPCC) and then from the IPCC itself, I conclude that it's all been vastly exaggerated. There is no certainty that there's any man-made warming (or man-made climate change) worth worrying about.

Don't get me wrong, the possibility that increasing greenhouse gases in the atmosphere might be causing warming was worth a proper investigation back in the 1980s. But look closely at the reports of those meetings and the claims that were made at the time. Some were speculation, others exaggeration and some simply false. The output of climate models was used to generate alarm but at that time the models were very primitive.

The United Nations Environment Programme (UNEP) either didn't assess the science or didn't care. Its actions mainly rested on its "precautionary principle", which says to act against a threat even when it's not fully understood. And the climate issue was a long way from being understood.

It's been the UNEP and other UN agencies, supported by various activist/scientists who see benefits that might be had in doing so, who have used political chicanery, assumptions, speculation and false science to convert the possibility of a human influence on climate into a widely-accepted "fact", all despite having no credible evidence.

The UNEP and the World Meteorological Organization (WMO) were instrumental in creating the IPCC, and they instructed it to investigate climate change, especially the influence of increasing greenhouse gases. In other words, the IPCC's role was to find evidence to support the claims already being made by those two organisations.

It has failed in this task because the so-called evidence that the IPCC presents changes with every new climate report.

The IPCC started out by saying "We don't know what else could be causing warming", which is a poor line of argument, but its second report admitted that there was much it didn't know. That second report relied for its claims on a scientific paper that had recently been written by IPCC authors and hadn't even been peer-reviewed by the journal it was submitted to. The paper was briefly mentioned in the next IPCC report, in a chapter written by some of the paper's authors, before it disappeared.

The third IPCC report featured the "hockey stick" temperature graph. A few years later that graph was shown to be a sham because similar graphs could be produced using random data, so that "evidence" wasn't mentioned in subsequent reports.

The fourth report asserted that global average temperatures were in agreement with climate models, trying to imply that the models accurately described what was happening. That was undone by the fifth report which showed that almost all models were flawed because their retrospective predictions of warming for the previous 15 years showed greater warming than temperature observations indicated.

In each of its reports the IPCC has largely ignored established atmospheric physics that shows that any increase in greenhouse gases will have negligible impact on temperatures because almost all of their impact occurred when far less of these gases were in the atmosphere. The IPCC says little about how greenhouse gases cool the atmosphere nor does it say much about any

warming caused by greenhouse gases being taken away by other methods by which the Earth's surface cools.

Despite the increase in atmospheric greenhouse gases over the previous 15 years, the IPCC's 2013 report was uncertain that any warming had occurred during that period. According to the previous claims of the IPCC, UNEP and WMO this couldn't possibly happen, so the fact that it did occur seriously undermined the notion of man-made warming.

UNEP and IPCC alarmism also gave rise to the United Nations Framework Convention on Climate Change (UNFCCC), established in 1992. Despite the absence of evidence, the UNFCCC immediately began claiming that greenhouse gases posed a serious threat to future climate. The UNFCCC has continued its bullying and bluster to create firstly the Kyoto Protocol and then the Paris Climate Agreement. The latter has many flaws, particularly no evidence of any danger and no clear "pre-industrial" temperature or any indication of how it could be determined.

Governments have foolishly endorsed the baseless claims of the IPCC and signed off on each Summary for Policymakers. This has led to governments supporting the equally baseless claims from the UNFCCC and the Paris Climate Agreement. In many cases the consequent climate and energy policies have imposed financial burdens on society for no certain and demonstrable gain.

The world has two choices. One is to continue to support the United Nations agencies with their exaggeration, false urgency, false science, doubtful assumptions and failed climate models - in other words to endorse fabricated claims for which there is no credible evidence.

The other choice is to reject the notions of the United Nations agencies and move on, to recognise that climate is constantly and naturally changing, and that we need to adapt to it.

Abbreviations used in this document

Official:

ICSU International Council of Scientific Unions (later renamed to "International

Council of Science")

IPCC Intergovernmental Panel on Climate Change

UNFCCC United Nations Framework Convention on Climate Change

UNEP United Nations Environment Programme WMO World Meteorological Organisation

Unofficial (for convenience):

V85 Conference in Villach in 1985

VB87 Workshop in Villach and Bellagio in 1987

T88 Conference in Toronto in 1988

Table of Contents

Summary	iii
1. Introduction	1
2. Key events leading to the creation of the IPCC	3
3. Flawed scientific claims	10
3.1 Temperatures over the previous 100 years were very uncertain	10
3.2 Climate models were primitive	11
3.3 The level of scientific understanding of many factors was low	13
3.4 Misleading ideas about the action of greenhouse gases	13
3.5 Other possible causes of warming were ignored	15
3.6 Conclusions	18
4. The creation of the IPCC and its early years	19
5. The UNEP's exaggerated and false claims have continued	
5.1 The IPCC's ever-changing "evidence"	24
5.2 The IPCC's "multiple lines of evidence"	26
5.3 Other IPCC failings	27
5.4 The UNFCCC	
6 Conclusion	30

1. Introduction

Man-made climate change is one of the most significant issues of our times. For more than 30 years we've been told that it is a threat to the future of our planet and that greenhouse gas emissions need to be reduced.

Governments locked themselves into endorsing the IPCC's claims when their representatives approved the statements made in the IPCC summaries for policymakers.

Many governments have now subsidised the generation of electricity by renewables (mostly wind and solar) and imposing other legislation that supports the IPCC beliefs. National economies have been skewed by those policies, such as through those subsidies virtually guaranteeing risk-free income for some people but imposing greater costs on others.

Science has also been distorted by prioritising climate research that supports the belief. This has meant financial windfalls, the development of reputations and increased power and influence for some organisations and individuals, that gives them a powerful reason for endorsing the notion of such a threat.

The public have largely accepted the claims without question, which is hardly surprising when even in highly developed countries relatively few people have the education, knowledge and experience to assess those claims. Many people know so little that they can't determine the real experts from the self-proclaimed experts who all too often have vested interests in continuing the threat.

Most people simply accept the claims made by the Intergovernmental Panel on Climate Change (IPCC) and believe it to be an independent scientific body that examines all possible influences on climate. I and many other people know that to be incorrect. We know, that the IPCC describes its primary role as reporting on the human influence on climate. Given that task it is not surprising that the IPCC claims that manmade warming poses a threat even when, as was the case from 1998 to 2013, the IPCC wasn't certain that any warming had occurred.

A few months ago, I became curious about who instructed the IPCC to report only on an assumed human influence and their reasons for doing so.

The answers were found in the official reports, from the late 1980s, of meetings that led to the creation of the IPCC. Subsequent documentation from the IPCC showed that it continued to use the assumptions, exaggerations, speculation and false science on which its creation was based.

Don't get me wrong. Back in the late 1980s the notion that emissions of carbon dioxide might be having an impact on climate was a possibility that was worth investigating. Over time however, despite the absence of any conclusive supporting evidence, what was only a "possibility" became a widely-accepted "fact". Politics had driven the matter, not honest science.

The documentation from the IPCC and WMO shows that this shift, from a "possibility" to a "fact", occurred through a mixture of political chicanery, false science, unrealistic assumptions, speculation, false claims of urgency and the omission of information that would show that the claims were more likely false than true.

This essay will show that the United Nations Environment Programme (UNEP) was the main driver of the sham and that it relied heavily on its "precautionary principle", which says that action should be taken to address a threat even if that threat is not fully understood.

In the late 1980s enough was understood to cast doubt on many of the claims being made, but the UNEP either failed to consider those doubts or simply ignored them.

The UNEP and World Meteorological Organisation (WMO) jointly established the IPCC and they defined the IPCC's objective as addressing the influence of greenhouse gases on climate - which is to say, of man-made warming. The IPCC has published five climate assessment reports in the last 30 years but the so-called "evidence" for man-made warming changes with every new report.

The lack of consistent evidence is not the only problem with IPCC reports, many of the IPCC's scientific claims are refuted by high-quality science.

But don't just take my word for this. Footnotes on many pages show my information sources and I encourage you to download the reports of the meetings in 1985, 1987 and 1988 to read for yourself.

Ultimately only one conclusion can be drawn. There is no evidence that man-made warming poses a significant threat now or will do so in the future. There is no climate crisis and no climate emergency, at least none that is demonstrably man-made.

The world has been misled by the various United Nations agencies and those who support them.

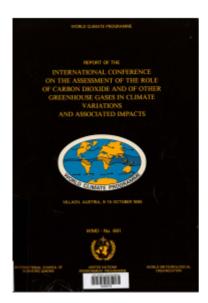
2. Key events leading to the creation of the IPCC

The notion that an increase in carbon dioxide might be causing global warming can be traced back at least to the late 1950s when old scientific claims were revived, but what really set the ball rolling for the IPCC's creation were three meetings, in 1985, 1987 and 1988.

The first, in Villach, Austria, was run jointly by the UNEP, WMO and the International Council of Scientific Unions (ICSU). (The ICSU was not a United Nations agency but did a lot of work for the UNEP on various environmental matters.) The conference report¹ says it was on "The Assessment of the Role of Carbon Dioxide and of Other Greenhouse Gases in Climate Variations and Associated Impacts". For brevity I'll refer to this conference as V85.

The second meeting was a set of two workshops held at Villach and Bellagio, Italy. The single report for the two workshops² is headlined "Developing Policies for Responding to Climatic Change". These workshops will be referred to as VB87.

The third event, held June 27-30, 1988, was a conference at Toronto, Canada, "The Changing Atmosphere: Implications for Global Security" (henceforth T88). It repeated much of what had been said at V85 and VB87 but received significantly more publicity than the two earlier events.



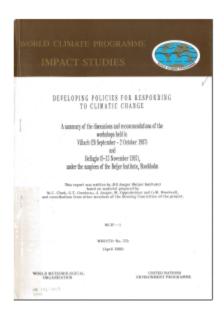


Figure 2.1 Reports of the Villach conference (left) and the Villach and Bellagio workshops (right)

¹ https://library.wmo.int/doc num.php?explnum id=8512

² https://library.wmo.int/doc num.php?explnum id=9482

 $^{^3 \, \}underline{\text{https://wedocs.unep.org/bitstream/handle/20.500.11822/29980/ChangAtmsProcedn.pdf}}, \textbf{see also https://enthusiasmscepticismscience.wordpress.com/2018/06/27/canadian-enthusiasm-remembering-toronto-88}$

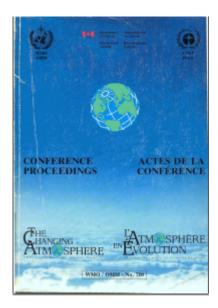


Figure 2.2 Report of the Toronto conference of 1988

A few people in particular stand out because they went on to have a big influence on the claims about man-made climate change. (I use the term "climate change" loosely; the only impact greenhouse gases might have is to raise temperatures and it takes some scientific contortions to turn that into changes in other factors such as rainfall, wind, snowfall, etc.)

The first individual is Professor Bert Bolin who studied at and then became Professor of Meteorology at the same university at which Svante Arrhenius made his 1896 claims about carbon dioxide causing warming. As early as 1959 Bolin claimed that an increase in carbon dioxide had already caused two to three degrees of warming over the previous 50 years.⁴ Prior to the Villach conference Bolin had already worked for UNEP and WMO, the latter as a member of an Executive Committee Panel of Experts on Climatic Change, established in 1974 or early 1975, to consider the possible influence of man-made emissions of carbon dioxide on climate.

At the Villach conference Bolin was one of three representatives from the International Meteorological Institute in Stockholm (IMI). The seven-page executive summary the IMI presented to the conference made numerous scientific claims of questionable accuracy that seem to be accepted unchallenged.

An evaluation of results from climate models leads to the conclusion that the increase in global mean equilibrium surface temperature due to increases of CO_2 and other greenhouse gases equivalent to a doubling of the atmospheric CO_2 concentration is likely to be in the range of 1.5 - 5.5°C.5

I find the range of temperatures given above to be curious. In his book⁶ published in 2007, Bolin mentions that Svante Arrhenius said in a paper published in 1896:

-

⁴ The Science News Letter, vol. 75, No. 19, (May 9, 1959), p 296 and http://www.nytimes.com/2008/01/04/obituaries/04bolin.html

⁵ V85 p20.

⁶ A history of the Science and Politics of Climate Change, Cambridge University Press, 2007.

... that the average global change of surface temperature due to a doubling of the carbon dioxide concentration would be 5.7°C warming. He recognised that the precise magnitude of the warming is uncertain and he later reduced this figure somewhat on the basis of additional computations.

It looks to me like Bolin's 5.7°C should in fact be 5.4°C⁷ but regardless of that, Arrhenius didn't reduce his figure "somewhat", he reduced it⁸ to either 1.6°C (without consideration of changes in water vapour) or 2.1°C (including consideration of changes in water vapour). That's a reduction to about one-third.

The two figures from Arrhenius, 1.9° C (average) and 5.4° C (or 5.7° C), are remarkably similar to the range given by Bolin. Maybe when Bolin said 1.5° C \underline{to} 5.5° C he really should have said " 1.5° C \underline{or} 5.5° C". (Several researchers in recent years have also estimated that a doubling of CO_2 will cause about 1.5° C warming.)

Bolin went on to be a leading figure in the global warming scare. The Villach conference recommended the creation of a joint WMO/UNEP/ICSU Advisory Group on Greenhouse Gases (AGGG) and Bolin was appointed to the AGGG as one of the two WMO representatives. He also was a leading player in the SCOPE 29 report (1986) and Brundtland report (1987), both emphasising man-made global warming, and then attended the Toronto conference in 1987 before being elected as the first chairman of the IPCC when it was formed in late 1988.

Another important player at these early conferences was Mostafa Tolba, a microbiologist, the Executive Director (i.e. head) of the UNEP from 1975 to 1991. The UNEP was established in 1972 with socialist billionaire Maurice Strong as its first head and Tolba as his deputy. Strong is on record as saying that the industrialized nations needed to be eliminated and that he could work at the UN, obtain the necessary money and not be accountable to anyone. Later, at the 1992 Rio Earth Summit, another UN conference on the environment, Strong said in his opening speech to the conference "Isn't the only hope for the planet that the industrialized nations collapse? Isn't it our responsibility to bring that about?"

Tolba's outspoken claims feature in both V85 and VB87. He said at V85 ...

It is clear now that scientists are reasonably confident that at current rates of build-up a global mean annual temperature increase of several degrees will probably occur over a period of half a century or so. 10

(Compare this with Bolin's comments above!)

and Tolba went on to say ...

-

 $^{^{7}}$ Table VII of the 1896 paper shows estimated increases in temperature for different latitude bands. The weighted average of his estimates (weighed by the cosine of the latitude at the centre of each band) is 5.4°C and even the simple average is 5.5°C.

 $^{^8}$ Svante Arrhenius, 1906, Die vermutliche Ursache der Klimaschwankungen, Meddelanden från K. Vetenskapsakademien s Nobelinstitut, Vol 1 No 2, p1–10. (See www.friendsofscience.org translation to English at https://friendsofscience.org/assets/documents/Arrhenius%201906,%20final.pdf or the original version in German at https://friendsofscience.org/assets/documents/Arrhenius1906.pdf).

⁹ Elaine Dewar, Cloak of Green: The Links between Key Environmental Groups, Government and Big Business, Lorimer Press, 1995.

¹⁰ V85 p11.

We cannot yet predict with any great accuracy regional patterns of climate change, but there are indications that there may well be a radical redistribution of the world's productive croplands.¹¹

And later ...

There is a need for a serious discussion between governments and industry on the feasibility of reducing industrial carbon dioxide and trace gas emissions.¹²

These three comments exaggerate, speculate and a demand action without any evidence to justify that action.

Tolba seems to be applying the UNEP's "precautionary principle", which in the context of climate and environment, basically says that if there are threats of serious or irreversible environmental damage, any lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

The problems with this approach are that it's very difficult to know how much one knows and doesn't know, the information available to date might be wrong or distorted, and that what's not known might radically alter the approach to the problem and might require serious changes to any models¹³. I would argue that at this point in time, on climate matters it was "all of the above".

The Villach conference, and ultimately the whole scare, were based on a single claim, which appears in the V85 report as:

The observed increase in mean temperature during the last 100 years (0.3 - 0.7°C) cannot be ascribed in a statistically rigorous manner to the increasing concentration of CO2 and other greenhouse gases, although the magnitude is within the range of predictions (0.3 - 1.1° C). ¹⁴

One estimated value is between 0.3°C and more than double that at 0.7°C and the other estimated value is from 0.3°C to almost four times that at 1.1°C ; these ranges are meaningless. As we'll see shortly the temperature records are very suspect, but that's not the only problem. In V85 the mean concentration of CO_2 for the 2000 years prior to the Industrial Revolution is claimed to be 275ppmv \pm 10ppmv and the concentration in 1984 to be 315ppmv, which is an increase of just 15% since 1750, the date the IPCC's 2013 report gives for the start of the Industrial Revolution.

In the Conference Statement that appears in the report of the conference, we find ...

Based on analyses of observational data, the estimated increase in global mean temperature during the last one hundred years of between 0.3 and 0.7°C is consistent with the projected temperature increase attributable to the observed increase in CO_2 and other greenhouse gases, although it cannot be ascribed in a scientifically rigorous manner to these factors alone.¹⁵

¹¹ V85 p11.

¹² V85 p12.

 $^{^{13}}$ A more contemporary take on the consequences of applying the precautionary principle, is at $\underline{\text{https://www.mercatus.org/bridge/commentary/how-many-lives-are-lost-due-precautionary-principle}} \,.$

¹⁴ V85, p20.

¹⁵ V85, p3.

The final word, "alone", indicates that other factors might influence climate but the only reference to natural variability of climate was 42 pages later in the V85 report where it referred to climate models producing output indistinguishable from natural climate fluctuations.

Fundamental uncertainty wasn't enough to stop a number of claims about urgency or speculations about future temperatures. A sense of the hyperbole at the conference can be gained from some of the statements that were made:

One is tempted to say that tampering with atmospheric composition may be tantamount to tampering with civilization. ¹⁶ - **Mr Donald Smith**, Deputy Secretary-General of the WMO.

As a matter of urgency, we must regularly review monitoring and research developments. If we fail to do this, we run the risk of being overtaken by events, and of having to deal with a global warming for better or for worse when it is already too late to do anything about it or to deal with its impacts. 17 – **Mostafa Tolba** of the UNEP.

The chance that the world of 2100 will have witnessed a single local nuclear power catastrophe is thus probably 10 and perhaps 100 times <u>less</u> than the chance that everyone in the world will be living in a Cretaceous-like hothouse, perhaps with beaches several meters above their present levels. ¹⁸ - **William C Clark** of the International Institute for Applied Systems Analysis.

and

UNEP, WMO and ICSU should establish a small task force on greenhouse gases, or take other measures, to: ... (v) initiate, if deemed necessary, consideration of a global convention. (v) – a recommended action in the Conference Statement"

... it is timely to <u>start</u> on the long, tedious and sensitive task of framing a CONVENTION on greenhouse gases, climate change and energy.²⁰ – **Thomas Malone**, ICSU

And yes, that convention was established in 1992, as the United Nations Framework Convention on Climate Change (UNFCCC), but more about that shortly.

There were also attempts to link the greenhouse gas issue to other UNEP issues at the time, such as acid rain (predictions of 10% of the world's trees to be lost) and the hole in the ozone layer, claimed to be due to chloro-fluorocarbons (CFCs).

Reduction of coal and oil use and energy conservation undertaken to reduce acid deposition [i.e. "acid rain"] will also reduce emissions of greenhouse gases; a reduction in the release of chloro-fluorocarbons (CFCs) will help protect the ozone layer and will also slow the rate of climate change.²¹

Over time the acid rain scare proved to be negligible. The death of trees in Canada was found to be due to weather patterns - a late cold snap killed new tree growth - and it was found that only

¹⁷ V85 p9.

¹⁶ V85 p13.

¹⁸ V85 p26.

¹⁹ V85 p4.

²⁰ V85 p33.

²¹ V85 p1.

a small portion of central Europe was affected by heavy sulphur pollution that could create acid rain.

If CFCs destroy the ozone layer then it's not a simple process. The Montreal Protocol to ban CFCs was agreed in 1987 and came into force in 1989 but five of the eight years with the most days with ozone holes larger than 10 million square km occurred after 2005 (16 years later). In 2015, almost 30 years after the protocol, the hole was more than 25 million square km for a record 41 days and 2011 (22 years after the protocol) had the greatest number of days when the hole was larger than 20 million square km.

One of the more sober comments at v85 was

The present temperature change signal predicted by climate sensitivity studies cannot yet be discriminated in a scientifically rigorous way from the noise due to natural fluctuations. If the model results are reliable, it is expected that the signal may be detectable with confidence in 10-20 years, when both the signal and the length of record have increased.²²

The Villach-Bellagio workshop paid little attention to this caution, saying

It would be inappropriate to postpone action until the consequences of warming, which lag behind emissions, are clearly visible.²³

And ...

The entire issue of increasing concentrations of greenhouse gases and the resulting climatic change involves a high level of uncertainty. If decision-makers were to wait until the scientific uncertainty is "acceptably" small, most policy responses would be too late. 24

The Toronto conference of 1988 added little to the questionable science that had been presented at earlier conferences (more on that in the next chapter) but received much greater publicity, probably stemming from James Hansen's "theatrics" in Washington on June 23, less than a week earlier.

With a warm night and then high temperatures forecast for the day of his presentation Hansen had the auditorium windows left open all night so that the room would warm appreciably for his presentation to government and the media about a threat of global warming.

Hansen's action led to some bold but very suspect claims at that conference, among them:

According to [Hansen's] studies, we can now say, with 99% certainty, that the greenhouse effect is upon us and that events such as the North American drought are increasingly likely to occur.²⁵ – **US senator Tim Wirth**

Humanity is conducting an unintended, uncontrolled, globally pervasive experiment whose ultimate consequences could be second only to a global nuclear war. The Earth's

²³ VB87 p26.

²² V85 p60.

²⁴ VB87, p32.

²⁵ T88, p40.

atmosphere is being changed at an unprecedented rate by pollutants resulting from human activities, inefficient and wasteful fossil fuel use ...²⁶ – **Conference Statement**

Scientists still have no unanimous view on the magnitude of the climate change problem, but it is established beyond any doubt that we will experience a global change in climate. An average global temperature increase over the next 50 years of 1.5 to 4.5 degrees Celsius is enormous ... The sea-level may rise 1 metre or more... ²⁷ - **Gro Harlem Brundtland**, the prime minister of Norway [underlining in original]

Brundtland was aware that the subject was poorly understood but she still pressed for action:

All of this may not happen, or not that severely. But the potential risks are so high that we cannot sit back hoping that problems will go away.²⁸

The Toronto conference ended on June 30th, 1988 and with the pressure put on governments to establish a panel to properly investigate the matter, the Intergovernmental Panel on Climate Change (IPCC) was created just over four months later.

Before looking at beginning of the IPCC it's instructive to look at the flawed scientific claims that were made in 1985 and 1987, then repeated or even exaggerated at the Toronto conference.

²⁶ T88, p292.

²⁷ T88, p16.

²⁸ T88, p20.

3. Flawed scientific claims

Many of the scientific claims made at the Villach conference, the Villach and Bellagio workshops and the Toronto conference were very dubious.

3.1 Temperatures over the previous 100 years were very uncertain

Page 3 of the V85 report, and similarly on its page 20, say (with my underlining added):

Based on analyses of observational data, the estimated increase in <u>global mean</u> temperature during the last one hundred years of between 0.3 and 0.7°C is consistent with the projected temperature increase attributable to the observed increase in CO_2 and other greenhouse gases, although it cannot be ascribed in a scientifically rigorous manner to these factors alone.²⁹

There was no reasonably accurate global mean temperature for the 100 years prior to 1985. Only in 1986, a year after this conference, did Nature publish "Global temperature variations between 1861 and 1984", written by Phil Jones, Tom Wigley and Peter Wright of the UK's University of East Anglia.

Even up to the end of 2002 the HadCRUT temperature dataset³⁰ was showing low coverage for much of the time (Figure 3.1). Annual average global coverage wasn't greater than 50% (i.e. half) until 1907 and fell below that figure during the two World Wars. It was only above 2/3rds (i.e. 66.6%) in 36 of the 100 years prior to 1985.

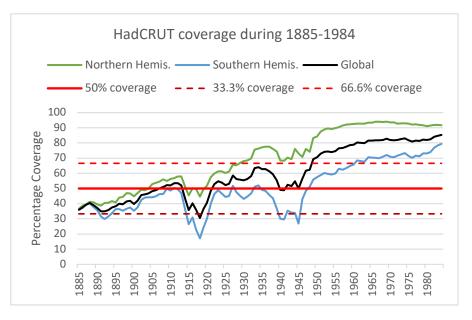


Figure 3.1 – Global and hemispheric coverage of data from 1885-1984 according to the HadCRUT (v1) dataset to the end of 2002 and published in early 2003. Coverage of the Northern Hemisphere (green line) and Southern Hemisphere (blue line) are percentages of each hemisphere, but the global coverage (black line) is percentage of the world.

.

²⁹ V85 p3.

³⁰ From https://crudata.uea.ac.uk/cru/data/crutem1 (CRUTEM4 is the latest version).

The pattern of the annual average temperatures (Figure 3.2) is nothing like a generally smooth increase that might be expected from a steady increase in carbon dioxide. The temperature trend over the 100 years from 1885 to 1984 is 0.47° C/century but that includes a 35-year period (1942 to 1976) when the trend was downward at 0.3° C/century.

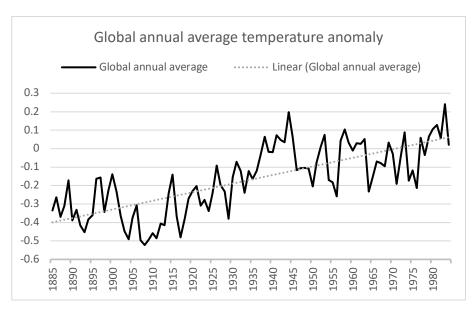


Figure 3.2 – The HadCRUT global average temperature from 1885-1984 was quite irregular and even fell slightly over the 35 years from 1942 to 1976. The irregular patter is incompatible with steadily increasing atmospheric carbon dioxide.

3.2 Climate models were primitive

The quote at the start of the previous section says that the warming of the previous 100 years "is consistent with the projected temperature increase attributable to the observed increase in CO_2 and other greenhouse gases". That's rather deceitful because climate models are adjusted until they match historical temperatures as closely as possible because a climate model would be of no value if its output was obviously incorrect. (But be aware that the "correct" output doesn't mean the model is correct, something in the model might be exaggerated and something else falsely reduced but together the errors reasonably balance and the model gives approximately the correct answer.)

The IPCC's 2013 report tells us something about the capabilities of those early climate models (Figure 3.3). The original caption (in IPCC 2013) goes on to say that the "boxes" of the atmosphere that models processed in the 1970s were "(roughly 500 km horizontal resolution and 9 vertical levels" compared to the 2013 boxes of "(roughly 100 km horizontal resolution and 95 vertical levels)"

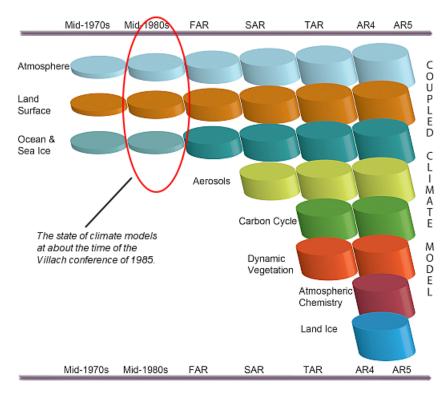


Figure 3.3. IPCC 5AR Figure 1.13 (with overlaid note). Original caption: The development of climate models over the last 35 years showing how the different components were coupled into comprehensive climate models over time. In each aspect (e.g., the atmosphere, which comprises a wide range of atmospheric processes) the complexity and range of processes has increased over time (illustrated by growing cylinders). ...

In contrast, the report of the Villach conference indicates the state of modelling at the time:

The state of current modelling capabilities is such that more confidence can be placed in large-scale (not smaller than 10⁶km²) and time-integrated (e.g. half annual) projections of various climatic parameters than in small-scale, short-term, and high-frequency perturbations.³¹

One example of a simplification is that the early climate models represented the world's oceans as a shallow water layer about 30 metres deep. This meant that known ocean phenomena, such as changing ocean circulation and the upwelling of cold water, were not included in the models.

The inaccuracy of early models can be seen from their predictions. The report for the VB87 workshops describes three future scenarios related to different estimates of greenhouse gas emissions, an "upper scenario" of accelerated emissions, a "low scenario" of radically reduced emissions and a "middle scenario" that continued the trend of small annual increases in greenhouse gas emissions. According to the climate models used at the time, the upper scenario would cause warming of 8.0°C/century, the middle of 3.0°C/century and the low of 0.6°C/century.

To put these in perspective, the HadCRUT4 temperature dataset, used extensively by the IPCC, shows that according to annual average temperature anomalies, the warming trend from 1985 (when V85 was held) to 2018 was equivalent to 1.8°C/century (or if we exclude 2015 and 2016 when an El Nino pushed global temperatures higher, just 1.7°C/century).

³¹ V85 p58.

This is the mid-point between the predictions given for VB87's "lower" and "middle" scenarios, and it has occurred without any significant reduction in greenhouse gas emissions

3.3 The level of scientific understanding of many factors was low

Most of the IPCC's climate assessment reports have mentioned the level of scientific understanding (LOSU) of various factors influencing climate. The lists tend to focus on possible human influences on climate and only focus on factors related to heat transfer by radiation. They might only be opinions but are nevertheless useful for indicating how the understanding (might) have increased over time. Table 3-1 summarises the LOSU described in various IPCC reports, although of course the level of scientific understanding is rarely anything more than a best guess.

			Level of Scientific Understanding					
IPCC report no.	Year	Total factors	Very High	High	Medium	Medium to Low	Low	Very Low
2	1995	8		1			3	4
3	2001	12		1	2		1	8
4	2007	16		1	2	2	6	5
5	2013	14	1	5	3		4	1

Table 3-1 No of factors assigned various levels of scientific understanding in IPCC climate assessment reports 3 to 6. These factors were only the possible man-made influences on heat transfer by radiation, not all possible influences on climate. (Blanks indicate that the rating wasn't used in that report or that no factors were listed with that rating.)

Given that in the second IPCC report (1995) the level of understanding of just one factor (greenhouse gases) was claimed to be High (see Table 3-1) and for none of the other eight factors mentioned in that report was it above Low, the level of understanding about 10 years earlier, in 1985 or 1987, would have been even lower.

3.4 Misleading ideas about the action of greenhouse gases

The report of the Villach-Bellagio workshop said:

These gases have an important effect in trapping energy at the earth's surface and in the lower atmosphere (the "greenhouse effect") leading to a warming thus to changes of climate.³²

And later:

The atmospheric concentrations of a number of trace gases are increasing. Despite their very low concentrations, some of these gases, notably carbon dioxide (CO2), nitrous

13

³² VB87, piii (Executive Summary).

oxide (N2O), methane (CH4), chlorofluorocarbons (CFCs) and tropospheric ozone (O3), have an important effect in trapping energy originating from the sun, in the form of heat, near the earth's surface (the "greenhouse effect").³³

The "trapping" of heat is also mentioned eight times in the T88 report, too many to quote here.

The VB87 and T88 reports describe only part of what happens with greenhouse gases.

Firstly, heat is not trapped by greenhouse gases; the gases only delay its escape into space. Delaying the overnight loss of heat will mean that the next day will start out warmer than it would if all of the overnight heat was lost.

Heat is lost by three methods, radiation - which is the only method that greenhouse gases can affect - convection and evaporation.

Convection is simply warm air rising. Hot air balloons use this same principle. Cooling by convection will occur until the ground is cooler than the air above it, which typically occurs at some time during the night.

Evaporation first involves breaking liquid water into molecules of H_2O , also known as water vapour. This requires extra heat energy, which is known as *latent energy* because it's rather different to normal heat. The warm, moist air rises until it reaches an altitude where the air temperature is low enough for the molecules combine to form water droplets, i.e. the water condenses. When this condensing occurs, the latent energy is released. Most evaporation is from the tropical oceans but it also takes place over land where there's sufficient moisture, which might be wet ground or in vegetation. Evaporation can occur at night but most of it takes place during sunlight hours when radiation from the sun provides the energy.

Both convection and evaporation lift heat energy high into the atmosphere, up past a lot of the greenhouse gas activity that takes place close to the ground.

Most of the heat loss from the Earth's surface is by radiation. Physicists describe energy as being released in packets, known as photons. Greenhouse gases can absorb radiating photons or emit photons by radiation as well as transfer energy by same method that other gases use, which is by a collision of molecules. (Just because a collision occurs doesn't mean energy is transferred; the molecules might just bounce off each other.)

With greenhouse gases, how the photons are received makes no difference to how they are emitted. Energy received by radiation might be released by collision (and vice versa).

Further, gas molecules have no idea of up and down so when a greenhouse gas molecule emits a photon by radiation it might go up, down or sideways (or some combination of these).

Very low in the atmosphere greenhouse gas molecules will catch photons as they are radiated from the Earth's surface. The air at this level is very dense and about 97 of every 100 molecules of normal "air" (i.e. air containing water vapour)³⁴ are either nitrogen or oxygen, neither of which is a greenhouse gas. One of these two major gases is very likely to collide with the greenhouse gas molecules and take the energy from them, especially given that millions of collisions are happening every second. Even if a greenhouse gas molecule caught a radiating photon and emitted it the same way, another greenhouse gas molecule would probably catch it and then collide with another gas molecule. Sometimes a photon of energy will go up (by radiation or

³³ VB87 p1.

 $^{^{34}}$ Most descriptions about the gases in the air refer to dry air (i.e. with no moisture vapour) but that's only true above deserts, or very cold places where the moisture has frozen and fallen out.

conduction through collision) and sometimes it will go down. Eventually a lot of the heat in this very low part of the atmosphere will find its way back to the Earth's surface or at least down to the atmosphere just above the ground.

Go higher in the atmosphere it's a different story because there's more water vapour than other greenhouse gases and the air is thinner (or less dense). The chances of molecules colliding become less and less as the altitude increases, and because water vapour is the main greenhouse gas it does a lot of radiating of photons, many of which go out into space.

Go higher again and eventually all of the water vapour will have been condensed, the reverse of evaporation. What's more, way up here the heat that convection raised and the heat that evaporation raised will combine with the heat that passed through the mixture of dense gases lower in the atmosphere. The main greenhouse gas at this height is carbon dioxide and because the less dense air means less chance of gas molecules colliding or even other greenhouse gas molecules catching an emitted photon, carbon dioxide is very effective at emitting photons of energy into space.

Putting all this together, at lower levels greenhouse gases are an obstacle to the Earth losing heat but at very high altitudes they are the atmosphere's cooling system.

An increase in any greenhouse gas other than water vapour will mean different things at different altitudes. In the upper atmosphere it will mean more cooling because more photons will be emitted into space. Very low in the atmosphere it will mean more obstacles to the Earth cooling.

But it's already a very crowded place down there with far more water vapour than carbon dioxide, and with lots of molecules of other gases to collide with. There's not much more "work" that can be done at this level. And if the Earth's surface or the thin layer of atmosphere above it are warmed, it's likely to mean that more heat is lost through convection and evaporation.

In summary then, despite what V87 and the Toronto conference said, greenhouse gases don't trap heat but simply delay its escape into space. There's far more water vapour than other greenhouse gases at the very low level in the atmosphere where most of the delaying of the heat loss takes place, so the "work" done by carbon dioxide at this altitude is very minor. What's more, convection and evaporation take place at these low levels and they take heat energy high into the atmosphere, past the obstacles to cooling.

It is highly unlikely that an increase in carbon dioxide will make any more than a negligible difference to temperatures³⁵.

3.5 Other possible causes of warming were ignored

By claiming that the temperature pattern was in accordance with predictions of warming driven by greenhouse gases the Villach conference seemed to be trying to imply that whatever factors caused climate change for the previous 4.5 billion years no longer had any influence on climate.

³⁵ Explore this a little further and you'll find that each greenhouse gas only catches and emits photons in certain wavelengths and that because water vapour is active at most wavelengths it often overlaps with other gases. There's a small range of wavelengths that only carbon dioxide works in and even at the amount in the atmosphere in 1985 there was very little more "work" that carbon dioxide could do.

Not only does this make no sense but other reasons can be found for the slight warming from 1950 (when there was finally data from more than half of the Southern Hemisphere) to 1985.

Figure 3.6 shows the historical temperature for the last 10,000 years according to data obtained from ice cores in Greenland.³⁶ During that time temperatures were very rarely as low as they were over most of the last 800 years. The figure also shows regular periods of warming (see the spikes on the graph) at about 1,000 years apart over the last 10,000 years, which suggest that warming was due to occur. The reasons might not be known but it's a regular pattern that shouldn't be ignored.

Another plausible reason for the global temperature pattern since 1950 - I'm excluding data prior to that year because global coverage was poor - was the El Nino-Southern Oscillation (ENSO).

There are ways of measuring the strength of the ENSO and which way it is acting but only the ends of the range of values matter much, indicating La Nina events (cooler and often wetter) and El Niño events (hotter and often drier). Between the two extremes the ENSO is regarded as "neutral".

One way to measure the ENSO is the Troup SOI, which is based on air pressure at Darwin, Australia and Tahiti. Confusingly the SOI values are the opposite to the effect on temperature, with positive values indicating La Nina (cooler) and negative values El Niño (warmer).

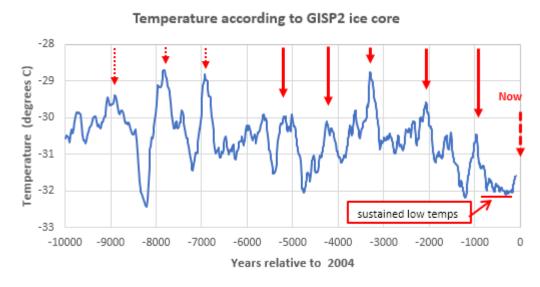


Figure 3.6 – Temperatures according to ice cores from the GISP2 project on the ice cap in Greenland. The red arrows indicate a rather regular pattern of warm periods. Very rarely over the previous 10,000 years were temperatures lower than they were in the last 800 years.

Figure 3.7 shows the HadCRUT3 average global temperature anomaly (from the same data as earlier) and the Troup SOI. The SOI values have been reversed so that negative values (which are the El Niño side of the scale) are upwards and correspond with warmer temperatures. Two large volcanic eruptions kept temperatures cool from about 1965 to 1967 but otherwise temperatures

_

³⁶ No-one seems willing to say whether this, or similar claims based on a handful of trees at some location, only reflect local temperatures or temperature from a wider region. Perhaps that's because if they say that it's only local temperatures then they won't be able to use the same data and argument that it's global.

were rising and falling as the ENSO changed, particularly after about 1970 when temperatures changed about six months after the ENSO changed.

There were few El Niño events for the 25 years prior to 1976 but more El Niño events after that year. With El Niño events being warmer, this would have meant higher global average temperatures.

HadCRUT3 global average temperature anomaly and Troup SOI (3-month averages)

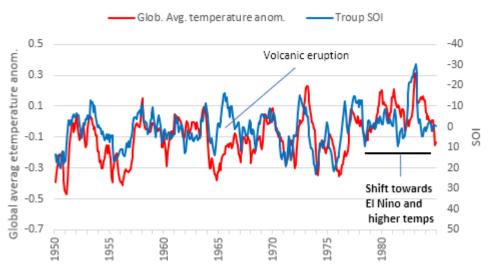


Figure 3.7 The Troup SOI (a measure of the ENSO) and global average temperature anomaly. The two lines do not match perfectly because temperature is not controlled by just one factor, but the similarities in the patterns are clear. Moreover, the ENSO shifted towards more frequent El Nino events in 1976 and global temperatures rose shortly after.

Various IPCC climate reports agree with the idea of a climate shift around 1976. The first IPCC report (1991) said that mathematically removing the effect of the ENSO meant that the rise in temperature over the previous 15 years was cut by half. The second report (1995) said:

Since [1976/77] there have been relatively more frequent El Niño episodes, with only rare excursions into the other extreme (La Niña episodes).

The IPCC's third report (2003) said that the average global surface temperature had increased by approximately 0.6°C since the late 19th century and that most of the warming had occurred in two periods, from about 1910 to 1945 and since 1976.

The IPCC's fourth report says:

The 1976–1977 climate shift, related to the phase change in the Pacific Decadal Oscillation and more frequent El Niños, ...

But also says:

The 1976 divide is the date of a widely acknowledged 'climate shift' (e.g., Trenberth, 1990) and seems to mark a time (see Chapter 9) when global mean temperatures began a discernible upward trend that has been at least partly attributed to increases in greenhouse gas concentrations in the atmosphere.

3.6 Conclusions

The key scientific claims made in the reports of the V85 conference and the VB87 workshops are questionable and sometimes even contrary to evidence. The following list contains some of the major issues:

- 1. The pattern in global average temperature over the previous 100 years was very uncertain, which means that the trend is also not known with any confidence.
- 2. The climate models in 1985 were very crude and should not have been relied upon.
- 3. There was poor understanding of many factors that influence temperatures
- 4. The actions of greenhouse gases and the processes by which the Earth cools were either not well-understood or were selectively presented to convey a situation of greater concern.
- 5. The contributions of natural influences to the warming of the last 100 years, as inaccurate and assumption-laden as it was, were largely ignored.
- 6. Blaming greenhouse gases for a temperature trend where extreme temperature values are easily attributable to ENSO events was unprofessional.

4. The creation of the IPCC and its early years

With the hyperbole and dubious science of the Toronto conference being widely reported as if they were indisputable facts, coupled with the impact of James Hansen's theatrics on the administration of US President Ronald Reagan, it wasn't long before the IPCC was created.

The report of the first meeting of the IPCC on 9-11 November 1988 says³⁷ the head of the UNEP, Dr Mostafa Tolba:

... stressed that the Panel should, as a first step, identify the agreed facts and projections, separate them from mere speculations and bravely inform the world what ought to be done. [IPCC session 1, p2]

This is extraordinary because it was the UNEP's knee-jerk "precautionary principle", which speculates abouts a need for action rather than wait for evidence, that had led to the creation of the IPCC. Tolba also wanted the IPCC to bravely inform the world about the outcome, which suggests that he was confident that he already knew what the IPCC would find and that it would be bad news for the world.

The first session of the IPCC saw 63-year-old Bert Bolin elected as chairman of the new organisation. As we saw earlier, he had said almost 30 years previously that carbon dioxide was causing warming and he was behind the speculation and temperature predictions of the events in 1985 and 1987. It's unlikely that a more biased potential leader of the IPCC could have been found.

The objectives defined for the IPCC by the governing bodies of the WMO and UNEP (and described in WMO Executive Council Resolution 4 (EC-XL)) were adopted at the first meeting. These were:

- a) Assessing the scientific information that is related to the various components of the climate change issue, such as emissions of major greenhouse gases and modification of the Earth's radiation balance resulting therefrom, and that needed to enable the environmental and socio-economic consequences of climate change to be evaluated;
- b) Formulating realistic response strategies for the management of the climate change issue. [IPCC session 1, p4]

There's no explicit definition of the "climate change issue" but the influence of greenhouse gases is certainly assumed. From the outset then, the IPCC's task was to focus on greenhouse gases and not the wider question of natural influences on climate.

Ten years later (1998) the role of the IPCC was redefined, or more explicitly defined, on equally narrow terms:

The role of the IPCC is to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation. IPCC reports should be neutral with respect to policy, although they may need to deal objectively with scientific, technical

_

³⁷ http://www.ipcc.ch/meetings/session01/first final report.pdf

and socio-economic factors relevant to the application of particular policies.³⁸ [emphasis added]

At the first session of the IPCC the representatives of 18 governments and one from the Commission of the European Community (which later became the European Union) presented statements concerning national views, policies and actions related to climate change and these give some idea of the thinking of governments.

Most are quite restrained, appreciating the establishment of the IPCC, expressing a need for proper research and a willingness to work with the organization, but a few stand out for various reasons. Some expressed urgency (e.g., Australia, Norway and Sweden), others were concerned about uncertainties (e.g., Canada, USA) and some had a foot in both camps, saying sound scientific evidence was required but they still pressed for prompt action (e.g., Japan, United Kingdom).

A comment from Israel was a stand-out but it was largely ignored:

We have had some apocalyptic prophecies concerning the planet Earth, due to global warming. It might have been influenced by recent summer events of the droughts and furious hurricanes in America, by the extraordinary heatwave in the eastern Mediterranean, etc. But, before we cry "Wolf, wolf", we should have some scientific basis for the cry. Carbon dioxide increased considerably in the last thirty years but our comparison of 1920-50 normals [i.e., average temperatures] with those of 1950-80 show some cooling and increase in precipitation, which is not in accordance with the global predictions for sub-tropical regions.

The second session of the IPCC³⁹ (Nairobi, Kenya, June, 1989) moved forward from many administrative issues in the first session, with the views of many key people starting to become clearer.

Mostafa Tolba of the UNEP was up to his usual alarmism, saying "the impacts of climate change and global warming would have serious consequences for humanity" [IPCC session 2, p1]. He went on to say that international relations would change:

To tackle the problem of climate warming effectively, radical changes would be necessary in international relations, trade, technology transfer, and bilateral and *multilateral strategies.* [IPCC session 2, p2]

At the same session IPCC chairman Bert Bolin said:

There are some key issues on which much uncertainty exists. For example, how has climate changed in the last 100 to 150 years? How much have human activities contributed to such change? What will be the regional distribution of the expected climate change? Despite the uncertainties, there is little doubt about the role of human intervention and its potential in causing these changes.

Thus, caution has to go hand in hand with prudence. While the model results of the warming and their possible attendant effects have to be interpreted with care, there

³⁸ "Principles Governing IPCC Work" at https://www.ipcc.ch/site/assets/uploads/2018/09/ipcc- principles.pdf

³⁹ http://www.ipcc.ch/meetings/session02/second-session-report.pdf

should be no delay in preparing to act to safeguard the future of the planet. [IPCC session 2, p3-4]

It is simply incredible that Bolin

- a) Didn't know how much climate had changed in the last 100 years despite having said in Villach that the estimated influence of the increase in carbon dioxide over the last 100 years was very comparable to the increase in global mean temperature.
- b) Didn't know how much human activity had contributed to the change. (Could it be zero or close to it?)
- c) Despite the above, insisted that human activity was causing warming and said action should be taken immediately (and apparently regardless of the amount it was causing).

Early the next year, at the third session of the IPCC (Washington D.C., USA, February 1990), Tolba and Bolin continued to make unsubstantiated claims. The report of the session⁴⁰ says:

Dr Tolba said that while more research was required, it would be irrational to continue gambling with our atmosphere. [IPCC session 3, p7]

And Bolin said:

The stakes for doing nothing are, however, very high. When we will be able to say with reasonable assurance that a global change is on the way, it is certain to be twice as large simply because of the inertia of the climate system. In addition, the higher emissions are, at the time an ongoing climate change is ascertained, the longer it will take until we might be able to stablilize climate; ... [IPCC session 3, p10]

He presented no evidence, and admitted that man-made climate change will take time to ascertain, yet he pressed for the stabilization of the climate as if the accusations against carbon dioxide were proven.

In August of the same year the fourth session of the IPCC⁴¹ was held at Sundsvall, Sweden. It included an overview of the first IPCC climate assessment report, which meant that the session marked the end of the beginning of the IPCC.

The principal players were still making unfounded claims. Obasi of the WMO said:

It is clear from the IPCC working group reports that economic activities in all countries are contributing to major changes in the chemistry of the whole atmosphere of our small planet. These changes will in turn alter the climate and sea level in ways which will affect all countries, mostly adversely for many generations to come. [IPCC session 4, p5]

But it was still Tolba of the UNEP who was leading the charge:

Scientific evidence indicates that we face warming trends faster than at any time in 10,000 years. If this human activity continues this unsustainable strain on our living

⁴⁰ http://www.ipcc.ch/meetings/session03/third-session-report.pdf

⁴¹ http://www.ipcc.ch/meetings/session04/fourth-session-report.pdf

biosphere, average temperatures may rise by about 0.3 degrees Celsius each decade, and by about 3C before the end of the twenty-first century. Now, your report leaves little doubt: the longer uncontrolled greenhouse gas emissions continue, the more difficult and costly inevitable control and adaptation measures will be. Stabilization of atmospheric greenhouse gas concentrations at present levels demand - in most cases - a minimum immediate reduction of 60% in global greenhouse gas emissions. ... These are the findings of distinguished scientists from all over the globe. The facts before us are horrifying, demanding we act now. [IPCC session 4, p7]

Bolin admitted that the magnitude of a human influence on climate wasn't known very well, nor how rapidly it might occur and yet he said:

However, a climate change cannot be stopped without <u>substantial reductions</u> of the use of fossil fuels. [emphasis in original]

In view of the very long lead times for the development of new energy supply systems, it is urgent to find ways and means to establish some long term policy for a sustainable supply of energy for the world as a whole. Reliance on coal, oil and gas, might not only double but in the long term perhaps even triple the atmospheric carbon dioxide concentrations. [IPCC session 4, p11]

He gave no evidence to support his claims about greenhouse gases and no reliable estimate of what impact the emissions of greenhouse gases might have. It's not even clear today, almost 30 years after Bolin's comments, that there is enough coal, oil and gas reserves available on Earth for carbon dioxide emissions to double the concentration, let alone triple it.

The overview of the first IPCC climate assessment report reflected the rhetoric from Tolba, Bolin and others, saying (among other things):

Based on current model results, we predict:

• An average rate of increase of global mean temperature of about 0.3°C per decade (...) assuming the IPCC scenario A (Business as Usual) emissions of greenhouse gases; this is a more rapid increase than seen over the past 10,000 years. This will result in a likely increase in the global mean temperature of about 1°C above the present value by 2025 (about 2°C above that in the pre-industrial period), and 3°C before the end of the next century (about 4°C above pre-industrial).

Our judgement is that:

- Global mean surface air temperature has increased by 0.3 to 0.6°C over the last 100 years, ... Over the same period global sea-level increased by 10 to 20 cm. These increases have not been smooth in time, nor uniform over the globe.
- The size of the warming over the last century is broadly consistent with the prediction by climate models, but is also of the same magnitude as natural climate variability.
- Natural sources and sinks of greenhouse gases are sensitive to a change in climate. Although many of the response (feedback) processes are poorly understood, it appears that, as climate warms, these feedbacks will lead to an overall increase, rather than a decrease, in natural greenhouse gas abundances. For this reason, climate change is likely to be greater than the estimates given above.

The IPCC's belief that the global average temperature was accurately known in each of the last 100 years and its belief that the temperature in pre-industrial times (around 1750) was known simply defy any logic. Both were unknown and unknowable because in those times very little temperature data was recorded and what data there was came from Europe, which was in the Little Ice Age at the time.

The final point quoted above says that positive feedbacks would increase any warming. Surely if that was the case then during some previous time when the world warmed these feedback processes would have increased warming, which would have increased the feedback processes, which would have caused even more warming etc. and the subsequent runaway warming would have made the planet uninhabitable.

But the IPCC had done the work demanded of it by the UNEP. It had turned the possibility that greenhouse gases might influence temperatures - a possibility that deserved investigation but unfortunately became ensnared in the UNEP's precautionary principle - into a widely accepted "fact", and had managed to do so without producing any credible evidence that mankind was causing warming.

5. The UNEP's exaggerated and false claims have continued

Since the IPCC was established it has continued the claims of the UNEP and the questionable science that triggered its "precautionary principle" into trying to panic the world. The distorted data, false statements, dubious assumptions, wild speculation and use of flawed climate models have continued, plus a few more tricks to manipulate public opinion.

Unfortunately, because government representatives are responsible for writing and approving the Summary for Policymakers that accompanies each of the three parts of each IPCC climate assessment report, governments have been complicit in and endorsed the IPCC's actions.

From what I can see only one attempt has been made by anyone connected with the IPCC to get some integrity into the organisation. The report of the IPCC's 11^{th} session⁴² (i.e. meeting) in December 1995 says:

4.2 The Russian delegation proposed that the SAR [Second Assessment Report] should include "the definitions and scientific proof of the criteria" of anthropogenically-posed "danger to the climate system". The Panel agreed that matters of this nature called for political judgements and decided not to include them in the SAR.⁴³

The IPCC is (supposedly) a scientific body and yet it was unable to set or recommend a scientific threshold above which point man-made warming should be considered dangerous. It looks like the IPCC was avoiding a question for which it had no credible and valid answer.

The IPCC has always had a problem with producing evidence to support its claims.

One way to look at it is that the IPCC's task is to summarise the state of the science by referring to published scientific papers. If any such paper provided that evidence then surely we would have been told about it long before now. The fact that no such paper is ever mentioned strongly indicates that none exists.

Another way is to consider the so-called "evidence" that appears in IPCC climate reports. More often than not, "evidence" that appears in one IPCC climate report is barely mentioned, if at all, in the next report.

5.1 The IPCC's ever-changing "evidence"

In its first report, published in 1990, the IPCC expressed some uncertainty about the extent of man-made warming but was confident that it existed. Its argument was based on the output of climate models, which it said were "only as good as our understanding of the processes they describe, and this is far from perfect". At least that much was honest.

The IPCC also said at the time that it didn't know what else, other than mankind's activities, could be causing warming. Earlier we saw that other explanations were readily available even back then.

⁴² All session reports available via https://www.ipcc.ch/documentation/ipcc-wg.

⁴³ https://www.ipcc.ch/site/assets/uploads/2018/05/eleventh-session-report.pdf p3.

The next report, published in 1995, showed that there was a lot that the IPCC didn't know. Figure 2.16 in Chapter 2 of that report listed eight factors and said that the "confidence level" in knowledge (i.e. level of scientific understanding) of one (Greenhouse gases) was "High" but understanding of the other seven agents was "Low" or "Very Low". Later IPCC reports had similar lists, as shown earlier. Again, accurate climate models can't be created when the level of understanding is poor.

The pivotal chapter of the second IPCC report - the chapter that blames human activity for warming - was so short of evidence that some of its authors wrote a scientific paper at the very last minute so that the report could quote that paper. It had been submitted to a journal but not reviewed and certainly not published when the IPCC report cited it. Former IPCC chairman Bert Bolin has mentioned how both the report chapter and other parts of the report were altered to include the paper's claims. Despite being quoted by the IPCC, the paper wasn't published until almost 18 months after the report had been published, at which time it was widely criticised and largely dismissed.

The paper was mentioned in the next IPCC report, in a chapter which was written by 34 people including six of the paper's twelve authors, two of whom had overall control of the chapter. By the fourth IPCC report it received only three brief mentions.

In an interesting prelude to the third IPCC climate report, at the IPCC's 17th session, in September 2001, Dr. K. Töpfer, Executive Director of the United Nations Environment Programme:

... congratulated the Panel for its progress in the Third Assessment Report, which shows new and clearer evidence of climate change.⁴⁵

At this time the IPCC had been in existence for 13 years and yet Töpfer is talking of "new and clearer evidence" of climate change. This seems to be an admission that evidence presented in the two previous climate reports was weak.

The third IPCC assessment report, featured Michael Mann's "hockey stick" temperature graph. It showed that global average temperatures had been declining for the previous 1000 years but had shot up in recent times, its shape mimicking a hockey stick. Never mind that this contradicted the IPCC's first report that had shown a very different graph of past temperatures.

The "hockey stick" graph was featured eight times in the IPCC's complete report and was widely copied by government agencies. Just a few years later two Canadians, McIntyre and McKitrick, showed that the processing of the data for the graph would create a similar "hockey stick" from totally random numbers, which meant that the graph was nonsense.

The next report, the fourth, didn't mention the "hockey stick" temperature graph and said almost nothing of earlier "evidence". It relied on a weak correlation of average global temperatures rising as the concentration of greenhouse gases increased and temperatures being "consistent with" temperatures predicted by climate models.

Chapter 1 of that report explicitly said that a detected change in climate could be attributed to human activity if the change was consistent with climate model simulations that included manmade factors, but not consistent with explanations that didn't include those factors. Such a statement could only possibly be acceptable if it was clearly demonstrated that climate models

_

⁴⁴ Bolin "A History of the Science and Politics of Climate Change", Cambridge University Press (2007) p113 of paperback edition.

⁴⁵ https://www.ipcc.ch/site/assets/uploads/2018/05/final-report-10.pdf p1.

were 100% accurate but as we've seen, the level of scientific understanding of many factors was low.

The IPCC's fifth report, published in 2013, undermined much of the so-called evidence in earlier reports. The executive summary of Chapter 2 said:

... the rate of warming over the past 15 years (1998–2012; 0.05 [–0.05 to +0.15] $^{\circ}$ C per decade ...

This was repeated in the body of the chapter (twice on p 194) and in the Summary for Policymakers.

The figures in square brackets indicate the statistics known as the confidence limits, used when you don't have all of the possible data. The rate of warming in the square bracket, "-0.05C", is negative and it indicates cooling. This means that the IPCC wasn't even certain that any warming had occurred over the 15 years. During that same period atmospheric carbon dioxide increased by 27.15ppm, from 366.7ppm to 393.85ppm. That increase in ppm represents an increase of almost 30% in the amount above the baseline of 270ppm claimed for pre-industrial times. A large increase in greenhouse gases and yet no warming is contrary to what the UNEP, WMO and IPCC have claimed since the mid-1980s.

Chapter 9 showed how badly the climate models performed, saying that 111 of 114 climate models predicted greater warming over the previous 15 years than the temperature data indicated.⁴⁶ The same chapter tried to explain why the models might have been wrong. It said that one possibility was the incorrect calculation of the effects of greenhouse gases.⁴⁷ The Summary for Policy-makers said the same thing in different words.⁴⁸

5.2 The IPCC's "multiple lines of evidence"

The fourth IPCC climate report started claims about multiple lines of evidence that have continued into the fifth report, published in 2013. The fourth report's arguments were weak, related largely to comparing temperature changes to those predicted by models, and relied heavily on expressions like "is consistent with" as if this amounted to proof of cause.

The multiple lines of evidence discussed in the fifth IPCC report were just as weak.

One line of "evidence" was that global temperatures are rising. This isn't evidence but simply a pre-requisite because before warming can be blamed on something there must be some warming.

⁴⁶ "... an analysis of the full suite of CMIP5 historical simulations (...) reveals that 111 out of 114 realisations show a GMST trend over 1998–2012 that is higher than the entire HadCRUT4 trend ensemble ..." [WGI contribution, chapter 9, text box 9.2, page 769, and in full Synthesis Report on page SYR-8].

⁴⁷ "This difference between simulated [i.e. model output] and observed trends could be caused by some combination of (a) internal climate variability, (b) missing or incorrect radiative forcing and (c) model response error". [AR5 WG I, chapter 9, text box 9.2, page 769].

⁴⁸ "There may also be a contribution from forcing inadequacies and, in some models, an overestimate of the response to increasing greenhouse gas and other anthropogenic forcing (dominated by the effects of aerosols)." [AR56 WG I SPM, section D.1, page 15, bullet point 2, and in full Synthesis Report on page SYR-8].

Another of the multiple lines is that warming has occurred simultaneously with the increase in greenhouse gases. This is a correlation; it's not proof of cause. As mentioned above, the same IPCC report indicated that very little warming had occurred over the previous 15 years. Hidden away in a different chapter we were told of the increase in greenhouse gases over that time.

Another so-called line of evidence is that warming is in accordance with the predictions of models. As mentioned above, the same IPCC report described serious flaws with models and how almost all of them predicted greater warming for the previous 15 years than had occurred.

Figure 5.1 indicates the predictions of models, both in the past (grey lines) and the future (blue lines), along with the average of the global average temperature anomaly derived by four temperature datasets (and based on observations). During the period 1992 to 2005 climate models produced a greater temperature trend than temperature observations indicated and by 2012, when the graph was created, the global average temperature anomaly derived from temperature observations was at the lowest edge of climate model estimates.

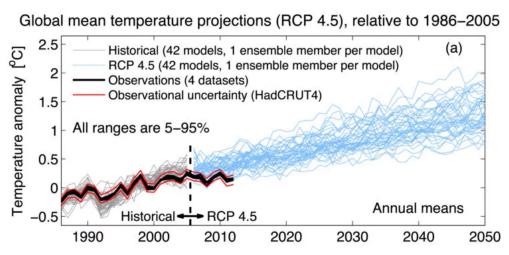


Figure 5.1 – IPCC 2013 report figure 11.6. Temperature observations in thick black and model predictions in grey and light blue. Even from 1991 to 2005 the temperature trend predicted by models (shown in grey) was greater than the trend calculated from temperature measurements. (The "RCP 4.5" refers to a scenario that sees carbon dioxide emissions increasing to about 2060 when it flattens off. This graph is only to 2050, which means that change after 2060 is not reflected by the graphs and we're talking "business as usual".)

In summary, the IPCC's claim of so-called "multiple line of evidence" simply does not hold up to scrutiny and in fact provide they no evidence of man-made warming or man-made climate change.

5.3 Other IPCC failings

Aside from the question of evidence there are many other problems with the IPCC's work, from false scientific claims, to issues it overlooks and baseless conclusions.

- It continues to imply that greenhouse gases only cause warming, that they "trap" the radiation by which the Earth cools, and make little mention of greenhouse gases cooling the atmosphere and that convection and evaporation also cool the Earth's surface.
- Buried in the detail we find that the IPCC admits that direct warming from greenhouse gases is quite small but, despite the absence of supporting evidence, the IPCC claims that substantial positive feedbacks increase that warming.
- It emphasise the "Global Warming Potential" (GWP) of other greenhouse gases in the atmosphere but fails to mention how little there is of these gases and that water vapour (most cases) and carbon dioxide (a few other cases) operate in the same wavelength bands and nullify any warming that might occur near ground level. (High in the atmosphere, when all water vapour has condensed and been frozen out, these other gases will increase atmospheric cooling.)
- It relies on "expert opinion" when it has no evidence to support its claims, but unlike the scientific papers that it cites, it provides no details about that expert opinion no information about questions asked, who the experts were and what responses they gave.
- It ignores challenges to the accuracy of the temperature data that it cites and the trends calculated from that data. It ignores serious shortfalls in the global coverage and it implies that trends are due to man-made warming, despite natural events (e.g. El Nino and La Nina) causing fluctuations in temperature patterns. (The argument for man-made warming would be weakened if less warming was reported.)
- It provides little, if any, scientific or statistical evidence to support its claims that ...

... most of the observed warming over the last 50 years is likely [66%-90% chance] to have been due to the increase in greenhouse gas concentrations. – (Third assessment report, 2001)

Most of the observed increase in global average temperatures since the mid-20th century is very likely [>90% chance] due to the observed increase in anthropogenic greenhouse gas concentrations. – (Fourth Assessment report, 2007)

It is extremely likely [95-100% probability] that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations and other anthropogenic forcings together. – (Fifth assessment report, 2013)

5.4 The UNFCCC

The other important event in the UN's climate saga was the creation in 1992 of the United Nations Framework Convention on Climate Change (UNFCCC).

From the moment it was created the UNFCCC claimed that greenhouse gases were causing significant global warming but it had no evidence to support it. After the IPCC published its second climate report in 1995 it was instructed to support the UNFCCC (i.e. to find the missing evidence, but as shown above it has failed to do so.)

The other major action by the UNFCCC was to redefine the simple term "climate change" to mean "man-made climate change" and put natural climate change under the name "climate variation". This meant that all past and future references to "climate change" would now be interpreted as "man-made climate change" regardless of what the user had intended.

This deliberate hijacking of language has caused huge confusion, which many people suspect was the intent. If the UNFCCC had any integrity it would not have altered the meaning of those words but introduced a new expression (e.g. "climate variation") or explicitly distinguished between natural and man-made climate change.

The UNFCCC is also responsible for the Paris Climate Agreement. This agreement talks of limiting warming to 2.0°C, preferably to less than 1.5°C above pre-industrial global average temperatures, but fails to state what that temperature was and how it was determined. (Almost all of the temperatures recorded at that time are from European weather stations and Europe was in the Little Ice Age in 1750, which according to the IPCC is when the Industrial Revolution began.)

6. Conclusion

The widely believed notion that man-made warming poses a serious threat is false. There's no credible evidence of any significant human influence on global climate and very little for any influence at all. There is no climate crisis and no climate emergency. The world has been fooled by the UNEP and the WMO, and the United Nations agencies that they created, and the evidence for this comes from those same organisations.

In the late 1980s dubious science, that piously assumed that historical temperature data and various assumptions and speculation were correct, amounted to no more than a *possibility* that carbon dioxide had caused global warming during the previous 100 years. This was enough to trigger the UNEP's precautionary principle, which is to take action against any possible threat even if the problem isn't fully understood. So that's what the UNEP did, regardless of how little was known and how doubtful the various claims and predictions were.

The UNEP, WMO and later the IPCC used several unethical practices to support their claims:

- They relied on powerful rhetoric rather than evidence
- They speculated on numerous issues for which little evidence or data was available
- They ignored the fact that the trend in global average temperature for the period 1885-1984 was very uncertain because of inadequate temperature data. The IPCC still cites data back to 1850 despite the temperature data source it uses admitting that data isn't available for more than half of the world's surface prior to about 1906.
- They have largely ignored the fact that natural influences on global climate for part or all of the last 4.5 billion years might still be operating. Even a lack of full understanding was no reason to dismiss them.
- They pretended that climate models in 1985 were sufficiently accurate for projections 100 years into the future. The 2013 IPCC report shows climate models to still be flawed, which means that predicted future temperatures are nothing more than speculation.
- They falsely claimed that the output of climate models approximately matching historical temperature patterns verified the accuracy of models when in fact the models had been adjusted until they produced the best possible match.
- The WMO and UNEP created the IPCC which, despite its name referring to "climate change", was directed to focus on the effect of greenhouse gases on climate (i.e. "man-made climate change").
- The WMO and UNEP were instrumental in the creation of the UNFCCC, which immediately began claiming, despite the absence of evidence, that man-made warming was serious and action needed to be taken against it. The UNFCCC also redefined "climate change" to mean only man-made climate change, which is different to the IPCC's definition and has caused huge confusion and made debate even more difficult.
- They imply that any heat that the atmosphere returns to the Earth is somehow trapped and that it is not lost through convection or evaporation. The full text of the IPCC's reports say otherwise but claim, without providing evidence, that the result is even greater warming.
- They have coerced governments of the developed world into supporting the UNEP/WMO belief by providing substantial research funding, which of course meant that researchers

became dependent on the scam for their income, to build their reputations and to attain positions of influence.

The IPCC's notion of what constitutes "evidence" has changed with every new climate report. After 30 years of work, despite its claims, it still has no credible and consistent evidence.

Has the man-made warming scare been a conspiracy? I think it probably was in the very early days, but gradually the support from various people for a range of reasons (ideology, environmentalism, gullibility, possible personal gain) took it away from being a conspiracy *per se*.

The reality, according to the atmospheric physics discussed in chapter 3, shows greenhouse gas emissions pose a negligible threat to temperatures.

It's not as if there are no other hypotheses about what caused the slight warming since 1950, assuming of course that the warming shown by the data is not due to flawed adjustment of temperature data.

The suggestion mentioned earlier, that the El Nino-Southern Oscillation has a large influence on global average temperature, was something I discussed in a peer-reviewed paper published in 2014. The relationship between the ENSO and global average temperature weakened around 1987 and I argued that changes in cloud cover could probably account for warming after that year. (Perhaps the reduction in cloud cover was caused by mankind's specific actions to reduce air pollution, much like cleaning a window means that more light passes through it, in which case the warming could be argued to have been man-made!)

But I'm certainly not the only person with alternative hypotheses to the UN's claims about greenhouse gases causing the warming. Zharkova suggests that variations in the solar magnetic field influence the climate and others suggest variations in the ultra-violet component of solar output. Svensmark, Shaviv and others suggest that cosmic rays influence cloud cover and that solar particle emissions sometimes reduce that influence. Some wonder whether changes in the distance between the Earth and the sun, combined with inter-planetary gravitational forces, might be influencing temperatures. And others talk of the circulation of warm and cold "blobs" of ocean water, perhaps moved by those inter-planetary forces, causing widespread warmer or cooler temperatures. (The movement of those passages of water might also cause the various changes in the El Nino-Southern Oscillation.)

The details of these alternatives are not important here; the important point is the existence of several alternative hypotheses each supported by scientific data, that might explain late twentieth century warming. There is also no reason why several of these alternatives could not have been the main reason for warming at different times. Contrary to the claims of the IPCC and other UN agencies, there are alternative explanations for the recent mild warming and perhaps even the changes in temperature prior to the industrial era.

Governments have endorsed the exaggeration and deceit of the IPCC by being party to and signing off the Summary for Policymakers that accompanies the contribution of each IPCC working group to each climate assessment report.

Governments have also established political policies based on the UNEP's exaggerated claims and through various subsidies these policies have often distorted economic markets, favouring some sectors and being detrimental to others. This is particularly evident in the emphasis that many governments put on electricity generation by renewables such as solar and wind and attempts to phase out fossil-fuel driven generation. The Paris Climate Agreement, instigated by the UNFCCC,

has brought even more pressure to reduce greenhouse gas emissions and to transfer large sums of money to developing countries.

The question that really needs to be answered is why governments aligned themselves to the views of the United Nations agencies without first making their own detailed investigation of the various claims and demanding to see what evidence supported them.

The world has two choices. One is to continue to support the United Nations agencies with their exaggeration, false urgency, false science, doubtful assumptions and failed climate models - in other words to endorse fabricated claims for which there is no credible evidence.

The other choice is to reject the notions of the United Nations agencies and move on, to recognise that climate is constantly and naturally changing, and that we need to adapt to it.
