Document 10

Item of business :

Climate Change Response (Zero Carbon) Amendment Bill

Submission name :

Chris Johnston

Comments

I am opposed to this bill as it does not achieve anything and is based on an assumption that runaway Climate Change is caused by humans - which appears to be unproven according to the science.

The measured relationship described by following the link below, shows that the average long term temperature of Earth can be predicted by using NASA s measurements of other hard planets/moons in our Solar System.

https://tallbloke.wordpress.com/2019/01/17/nikolov-zeller-reply-to-dr-roy-spencers-blog-article/

So the distance from our Sun and the weight of the atmosphere from objects like the Moon (no atmosphere) and Venus (80% CO2) can predict the avg long term temp of Earth - without taking into account the make up of the atmosphere at all - with engineering levels of accuracy.

Therefore any variation in the current temperature must be cyclic and can never be runaway.

Why would cycles be caused? Sun and cloud cover variation are being cited as the explanation recently... not any form of gas.

The interesting thing here is the failure of the NZ public service to give MPs any sort of advice that has passed through debate.

The link to this OIA shows that no-one ever in the Ministry of the Environment has discussed by email the paper quoted above - despite it being brought to their attention by the public.

https://fyi.org.nz/request/9425-all-documents-mentioning-climate-scientists-nikolov-and-or-zeller?nocache=incoming-32349#incoming-32349

Imagine that, no official has emailed to record that they require this new evidence to be reviewed, that they have reviewed it, that they agree or disagree with it, nor why they cane to that conclusion. Nor have they referred it to any external source for review. The response is also that they only take advice from the IPCC. This is classed as wilful blindness.

Other points....

If you think about it in very simple terms:

1) How can something that is at a concentration of 500 parts per 1,000,000 hold in or elevate temperatures on a planet fully exposed to the coldness of space?

2) The Sun is a much greater force on our world than any other

3) CO2 has been higher in the past than it is now and Nature survives

4) CO2 is generated in much greater quantities on Earth than humans produce, and the Oceans were fundamentally unmeasured until satellites - so their effect on climate has traditionally been put into the unexplained category which has been attributed to humans in the past.

5) Premature measures to decrease carbon usage that cause economic hardship are unwise when the science is not yet certain and technology for alternative battery and energy sources is not a sufficient level.

6) CO2 is good, it helps plants grow, and Carbon is the basis of life.

Recommendations

Do not proceed with the bill. Throw it out as misguided.

Chris Johnston Supp 1

Zero Carbon Select Committee

Transcript of Verbal Submission by Chris Johnston
Wednesday 21 August 2019
(Prepared beforehand)

Objectives
1) Get officials to investigate/assess the implications of this empirical discovery – audit this submission and the linked papers.
2) Recommend to hold off on the Bill until due diligence has been undertaken and the real level of risk and time limited imperative has been assessed.

INTRODUCTIONS

Chris Johnston - original submitter - Project Manager and Consultant in the Data Science and IT industry

INTRO

An empirical discovery made by Nikolov & Zeller (2017) started me on a journey to question the very basis of the "Greenhouse" climate theory, which claims that a minor atmospheric trace gas like CO_2 controls Earth's global temperature. Hence, I bring the discovery to this Select Committee's attention before unnecessary and certain damage is done to the NZ economy and the jobs that people and families depend upon.

SET THE SCENE

Using vetted NASA data from planets and moons in our Solar System that only became fully available in 2012, Drs Ned Nikolov and Karl Zeller made a surprising empirical discovery that was peer-reviewed and published in 2017. Their research results falsified the 190-year old "Greenhouse" theory.

The discovery can be summarized as follows: There are only two factors that determine the *long-term* temperatu e of Earth and any other hard-surfaced planetary body in the Solar System:
1) the total surface atmospheric pressure (a function of atmospheric mass and gravity), and
2) the planet's distance to the Sun.

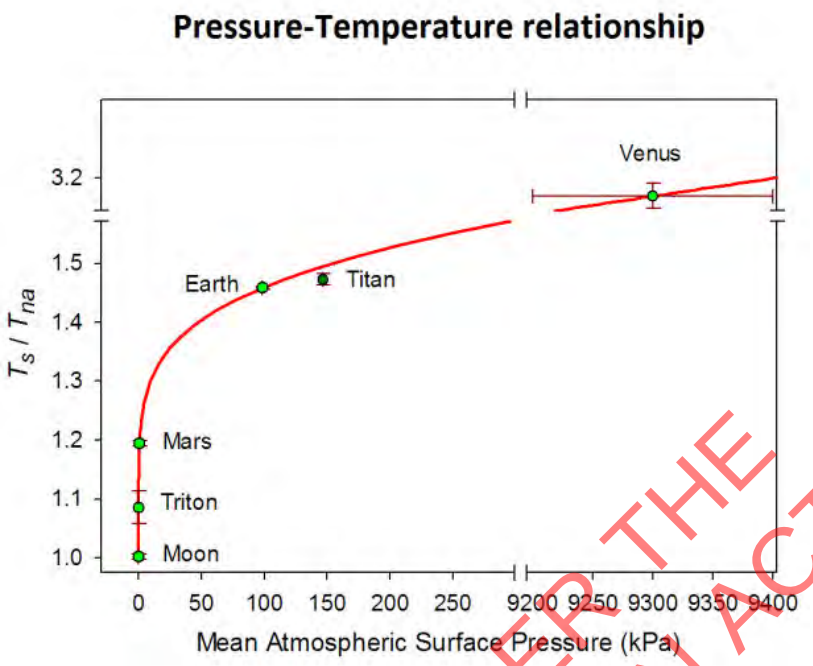
A fundamental implication of this discovery is that the atmospheric composition has *no* effect on a planet's average global surface temperature.

In other words, the atmosphere warms the surface of Earth through its total weight/pressure via a mechanism known in classical thermodynamics as "adiabatic (pressure-induced) heating".. not through Infrared Back Radiation as incorrectly assumed for over 100 years. Thus, human CO_2 emissions cannot in principle cause any climate change!

Despite the fact that planets and moons in the Solar System differ markedly in their atmospheric compositions and physical environments, their 30-year average global temperatures are accurately predictable from distances to the Sun and total atmospheric pressure irrespective of the amount of greenhouse gases in their atmospheres.

The Figure below lists the main physical and atmospheric parameters of the six planetary bodies used in the Nikolov-Zeller analysis. Temperatures of the Moon with no atmosphere and Venus with an extremely thick atmosphere consisting of 96.5% CO_2 are fully explainable by this discovery as part of the same cosmic thermodynamic continuum controlled by solar radiation and total atmospheric pressure.

The Figure below from Nikolov & Zeller (2017) illustrates how tight the observed relationship is between the thermal effect of planetary atmospheres (T_s/T_{na} ratio) and total atmospheric pressure.



Nikolov & Zeller (2017) also showed that Earth's global average temperature for the period 1981 – 2010 was predicable from their empirical model, when it only included information from other planets & moons while excluding Earth from the analysis. This demonstrates that the measured pressure-temperature relationship discovered by the authors was physically & statistically robust.

IMPLICATIONS FOR THE ZERO CARBON B LL

To repeat, this is a paradigm-shifting discovery in the following ways:

1) Earth's long term (baseline) average temperature is *stable* as long as the total atmospheric pressure remains unchanged.

Small variations in the global temperature around this baseline are possible due to Sun-induced changes in cloud cover/albedo. Cloud cover reflects sunlight and cools the Planet. These temperature variations are limited to about ±1°C around a baseline. Thus, a "runaway greenhouse" effect is physically impossible.

2) Any variation f om the baseline temperature must be cyclical as it's controlled the Sun's magnetic periodicities.

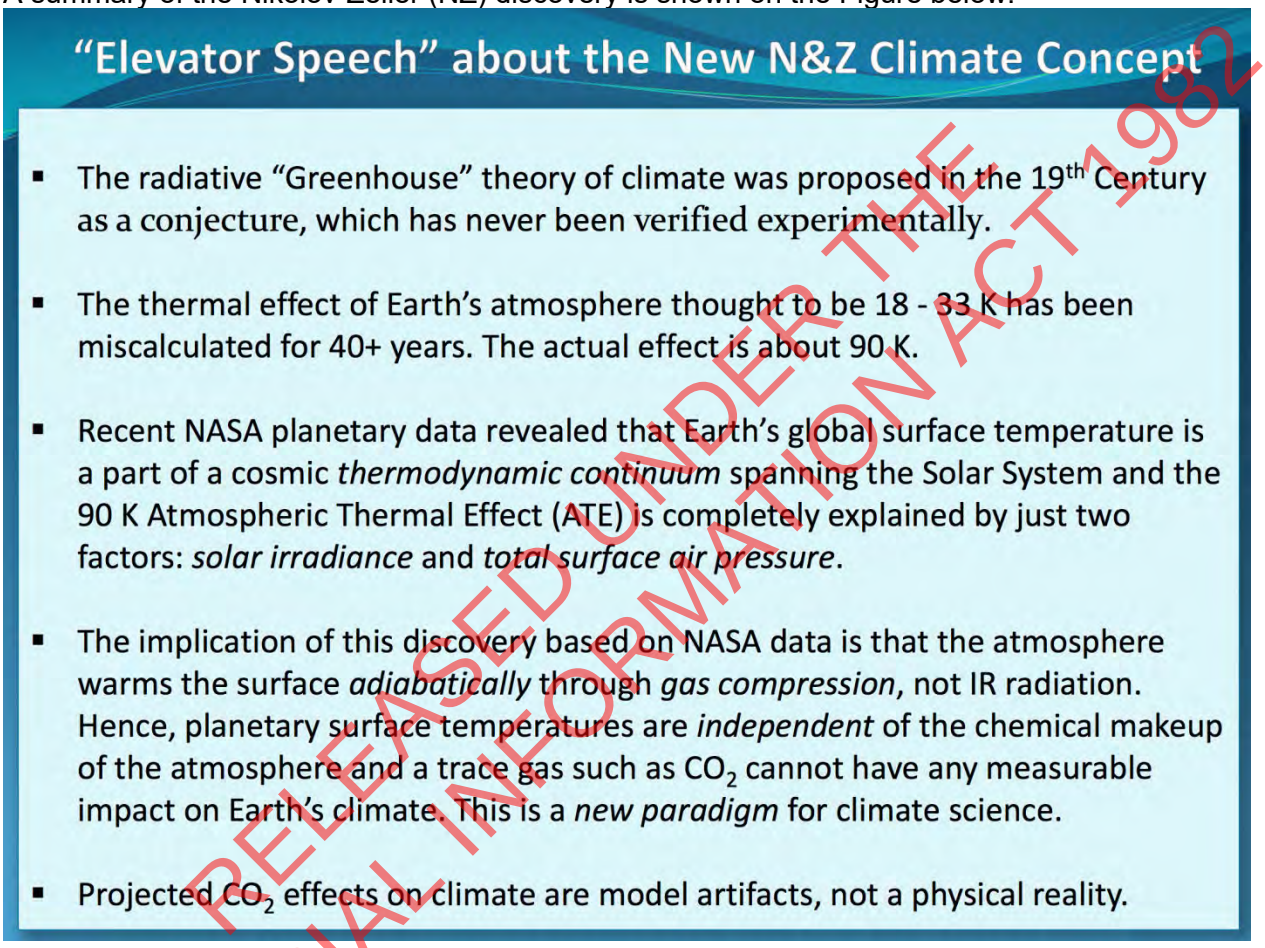
Multiple studies published over the past 10 years indicate that the observed warming of the 20th and 21st Century was most likely caused by reduction of global cloud cover and the resulting increase of surface solar radiation known as "global brightening" rather than greenhouse-gas emissions (Herman et al. 2013; Voiculescu et al. 2013; Stanhill et al. 2014; McLean 2014; Hofer et al. 2017; Loeb et al. 2018; Pokrovsky 2019).

Therefore, the upswing in global temperatures observed over the past few decades will reverse on its own without any human intervention. Thus, Nature is in control, not we humans!

3) Most importantly for this well intentioned Bill that you are diligently considering, the Nikolov-Zeller discovery implies that atmospheric CO_2 is *irrelevant* to climate change.

Since the contribution of non-condensable gases to global temperature is proportional to their partial pressures, changes in CO_2 concentration (which is a minor trace gas) cannot have any measurable impact on surface temperature and the global climate.

A summary of the Nikolov-Zeller (NZ) discovery is shown on the Figure below.



CONCLUSION

This is your individual and collective Weapons of Mass Destruction defining moment. Like Colin Powell at the UN Security Council, when all the people are telling you Carbon is the bad guy & the science is settled, this study is credible evidence from the back of the room saying there is nothing there and the generals - you - are about to launch missiles on innocent civilian targets - in this case Kiwi families who have jobs.

Please pause long enough to ask the officials advising the NZ Parliament to complete their due diligence on this study. The OIA request quoted in my submission shows they have not.

Please double check your intelligence and that your missile - this well intentioned Bill - is aimed at the right target and is suitable for the task.

For certain thus Bill will do damage if launched.

It is very unlikely there is any threat.... and given that satellites have not measured any further global temperature de facto warming for 20 years ... no emergency either. It is well known there is a warming “pause or hiatus”.

Let’s take our time to get the science right.....

We should not keep fighting windmills like Don Quixote.

===END===

FREQUENTLY ASKED QUESTIONS

A) *HOW *MUCH* DOES TEMPERATURE VARY FROM THE LONG TERM BASELINE SET BY PRESSURE AND SOLAR RADIATION?*

This is the $64M question... or in NZ’s case ... this Bill proposes to gamble our whole economy on the answer!

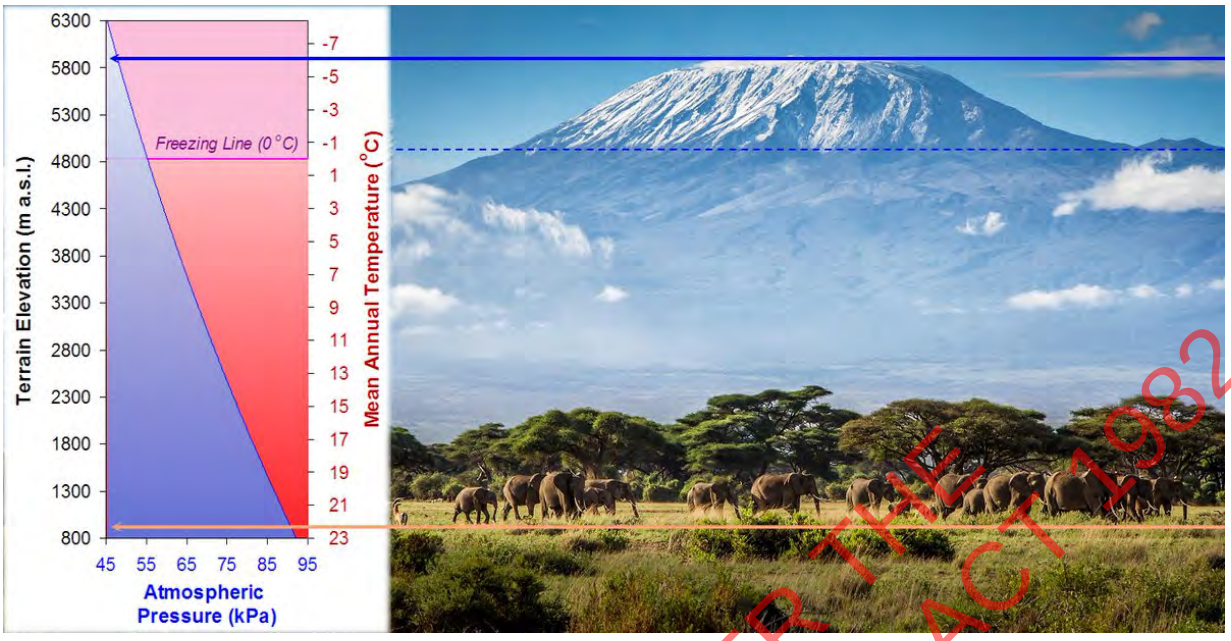
Available global temperature reconstructions covering the past 2,000 years indicate that this variation does not exceed ±1.0 °C... and at the moment we seem to be at the top of the curve.... that is we have experienced all the warming we are going to for the current 350-year cycle.

According to satellite data, global temperature de facto stopped increasing some 20 years ago. Earth is now headed towards a 30-50 year long cooling.

B) *HOW CAN I RELATE THESE FINDINGS TO WHAT YOU KNOW*

PRESSURE
Why is it cold at the top of a mountain?
It’s high in the troposphere.

What is special about a “high elevation” that makes it cold?
It’s the lower air pressure at height! Best example: Mt. Kilimanjaro located at the Equator has permanent glaciers at the Summit, where the mean annual temperature is -6°C, while the foothills situated ~5,100 m below the Summit enjoy a balmy mean temperature of about +23°C. The vertical pressure gradient causes an *adiabatic* drop in the mean annual of temperature of 5.7°C per kilometer, which is close to the *moist adiabatic lapse rate* typical for the Tropics (see Figure below).



What causes air pressure?
Pressure is caused by gravity acting on atmospheric mass.

How much does the temperature change with altitude on average?
Air temperature typically drops with elevation at a rate of 6.5 °C per km. This drop is known in atmospheric science as "adiabatic lapse rate". The term "*adiabatic*" means "without adding/subtracting heat" or "induced by change in pressure".

How much temperature change are the global warming theorists worried about - on average?
1.5 to 2.0 degrees Celsius compared to *preindustrial* climate. However, we have already experienced 1.4 °C warming since 1850. So, the entire claimed "climate crisis" is based on a "projected" additional warming of 0.1 to 0.6 °C, which is practically inconsequential.

Does CO_2 have any measurable effect on atmospheric pressure? No, it does not! Earth's global surface temperature will not budge even if we remove *all* CO_2 from the atmosphere. That's because the CO_2 partial pressure is miniscule compared to the atmospheric total pressure!

C) *WHY DOES THE AVERAGE GLOBAL TEMPERATURE CHANGE?*

On a time scale of decades to centuries, global temperature varies due to periodic changes in cloud cover/albedo driven by Solar magnetic activity, a mechanism that is completely absent from current climate models, but is the subject of intense research at the moment.

The net effect of clouds is cooling, because clouds (especially low-level clouds) reflect solar radiation back to Space, thus preventing it from reaching & warming the Earth surface. Clouds are the sunshade of the Planet!

D) *WHAT ABOUT ALL THE DATA THAT THE IPCC REFERS TO?*
Short Answer: There are a lot of data problems and misinterpretations. Much of the data cited by IPCC are simulated (model-generated) rather than real. There still appears to be analysts in

major institutions, who fiddle with (improperly manipulate) official data sets of surface temperature, sea-level rise, and ocean heat content.

Nikolov & Keller (2017) have used observed vetted NASA planetary data from multiple missions.

E) *WHAT ARE THE WEAKNESSES OF THE MEASURED NIKOLOV-ZELLER RELATIONSHIP?*

Data from more planets might reinforce the strength of the relationship and test corner cases, but we have to wait until such data become available. Nikolov & Zeller have made predictions in their paper about the temperature of independent planetary bodies using their model that can be verified by future NASA exploratory missions.

The results thus far are so strong compared to the IPCC models that there are grounds to call for an end to the CO_2-related climate panic.... and for refocusing of resources on managing through adaptation rather than unrealistically trying to influence Sun's effect on climate or "control" climate change via human carbon emissions, which is physically impossible!

We do not want to keep fighting windmills.

F) *WHO ARE NED NIKOLOV and KARL ZELLER?*

Nikolov and Zeller are Ph.D. Physical Scientists, who authored a significant peer-reviewed paper referred to in my submission. Ned Nikolov currently works as a physical scientist for the USDA Forest Service, where he manages an important Fire-Weather Intelligence Project. Karl Zeller is a retired research meteorologist formerly employed by the USFS Forest Service.

REFERENCES

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Hofer et al. (2017) Decreasing cloud cover drives the recent mass loss on the Greenland Ice Sheet. *Science Advances*, 3(6), e1700584, doi:10.1126/sciadv.1700584

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McLean (2014) Late twentieth-century warming and variations in cloud cover. *Sci. Res.: Atmos. & Climate Sciences,* 4, 727-742, doi:10.4236/acs.2014.44066.

Nikolov N, Zeller K (2017) New Insights on the Physical Nature of the Atmospheric Greenhouse Effect Deduced from an Empirical Planetary Temperature Model. *Environ Pollut Climate Change* 1:112. doi:10.4172/2573-458X.1000112

Pokrovsky (2019) Cloud changes in the period of global warming: The results of the International Satellite Project. *Earth Studies from Space* (in Russian), 1, 3-13, doi:10.31857/S0205-9614201913-13

Stanhill et al. (2014) The cause of solar dimming and brightening at the Earth's surface during the last half century: Evidence from measurements of sunshine duration. *J. Geophys. Res.Atmos.*,119, 10,902–10,911, doi:10.1002/2013JD021308.

Voiculescu et al. (2013) Clouds blown by the solar wind. *Environ. Res. Lett*. 8, 045032, doi:10.1088/1748-9326/8/4/045032

Document 11

Item of business :

Climate Change Response (Zero Carbon) Amendment Bill

Submission name :

Dougal Strahan

Comments

Firstly how accurate are the climate computer models in their forecasts and hindcasts? Are they accurate enough to build radical legislation on? What is the main data that drives this legislation?

Secondly will these policies do more good than harm for our citizens? Particularly for the poorest members of our society? I am most concerned with the increase in energy costs during cold winters.

Lastly I am concerned with the objectivity of the IPCC as identified by Christoper Booker in a recent publication. GLOBALWARMING: A case study in groupthink.
How science can shed new light on the most important non-debate of our time
2018 The GlobalWarming Policy Foundation.

Recommendations

Firstly I would like those involved in making the legislation to consider the accessible publication written by Dr Roy Spencer, Global Warming Skepticism for Busy People, 2018. I would like the trends identified by Dr Spencer to be addressed by the committee. Can they make transparent how much weight they give to the climate models in this legislation and identify the main scientific data sets that drive this legislation?

I would like to know the predicted power costs this legislation is expected to cause particularly for the poorest of society in heating their homes. How many cold related deaths could be expected from this legislation?

Lastly I would like those making the legislation to consider the well written publication by Christopher Booker GLOBALWARMING: A case study in groupthink.
How science can shed new light on the most important non-debate of our time
2018 The GlobalWarming Policy Foundation. In particular address chapter 7 The IPCC breaks its own rules: the consensus survives its first major scandal. How will this legislation ensure objective scientific control, monitoring and evaluation of these policies?

Submission on the Climate Change Response (Zero Carbon) Amendment Bill

I oppose the intent of this Bill for the reasons discussed below.

Climate Change

Climate fluctuations are continually happening and the major influence of that change is the sun. It's influence on the gulf stream La Nino and El Nino, etc. To target taxation on pastoral, (mainly family) farms is unreasonable in that they cannot pass on their tax cost and are already facing increased servicing costs from the actions of the NZ government, not to mention facing volatile and subsidised foreign markets. I feel, as a farmer, unappreciated and the whipping boy by the government and the public at large.

Those supporting the IPCC narrative of human activity causing global warming have succumbed to 'Project Fear', or have a vested interest, or an agenda to fulfill. These include the carbon credit a whole new form of currency being billions of dollars traded. I understand in the 1980s, Exxon Mobil itself started the fossil fuel human global warming narrative.

Huge manufacturing profits are to be made in alternative green energy. In NZ's case and many other countries, this will be off sourced to China. No wonde they signed up to the Paris Climate Agreement.

With regards to the viability and construction of wind powered generators, Lord Christopher Monckton has investigated the cost of these and found it completely prohibitive in that it requires a 50 percent subsidy just to meet construction, let alone the decommissioning which is not calculated (refer to https://youtu.be/ZH4m-Cs-u3Y). In addition, there is the impact on seabirds, given the size of the blades are around that of a 747 and the tips travel at 300 kilometres per hour. Dr Patrick Moore (ex Greenpeace) asserts that he has 'thousands' of photos of these dead b rds.

Then there are solar panels which are the most inefficient means of converting solar power.

Climate deniers

Those that challenge the narrative of climate change are called deniers which is a sordid attempt to link their opinions with the Holocast.

Those challenging the narrative are usually retired professionals, university professors with doctorates, including Professor Freeman Dyson (Princeton University), Professor William Happer (Princeton University), Patrick Moore (Foundation Member of Greenpeace), Piers Corbyn (Astrophysicist), Dr Willie Soon and Dr Roy Spencer (previously senior scientist on climate studies for NASA during the Clinton/Gore administration who was told what to say during that time, and following his resignation in 2001 is now a Professor at the University of Alabama). Dr Roy Spencer discusses how climate related measurements were previously conducted by land based measurements but are now all conducted through satellite. However, cloud cover frequently distorts these satellite readings and resulting in skewed

measurements. He also states that the IPCC has a fundamental flaw in that they are mandated to find the *human* causes of climate change.

Please refer to the video clips below in support:

- *https://youtu.be/UWahKIG4BE4 (Patrick Moore)*
- *https://youtu.be/U-9UIF8hkhs (Professor William Happer)*
- *https://youtu.be/sXxktLAsBPo (Patrick Moore)*
- *https://youtu.be/N2ldNuKZgoA (Piers Corbyn)*
- *https://youtu.be/BiKfWdXXfIs (Freeman Dyson)*
- *https://youtu.be/Qzf6z-oHP8U (Dr Roy Spencer)*

Scientists supporting the climate change narrative

Starting with Al Gore who, on his latest book '*Our Choice'* had an altered photograph of Earth on the cover, where some cloud cover appears to be removed and the cyclones altered: one in the northern hemisphere spinning the wrong way and another placed on the equator which is an impossibility.

Secondly, Professor Michael Mann who made a false statement to a Congressional hearing on climate change. He also fabricated the infamous 'hockey stick' graph, which misrepresented the 1930s climate temperatures to maintain his narrative *(see https://youtu.be/dcdPM5FY8Ug and https://youtu.be/S3f42t4C7XU)*

The world media is onto the narrative, for example, as quoted in NZ Herald article on 6 March 2019 under the heading '*The Earth is round, and we're warming it*' by Jim Salinger and Michael Mann *(https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12209554)*:

> "The BBC has adopted guidelines on their climate-change coverage and agreed:
>
> 1. Man-made climate change is real and the most widely accepted view on the science is that of the Intergovernmental Panel on Climate Change (IPCC). It is accepted by at least 97 per cent of scientists working and publishing in the field.
>
> 2. Because there is such a powerful consensus, there is no requirement to give climate deniers a platform. A debate with one expert scientist versus one denier demonstrates a false balance; to get a genuine balance you would need at least 97 scientists for every three deniers.
>
> 3. There might be occasions where contrarians and sceptics could be included in debates. For instance, discussing the speed and intensity of what will happen in the future, or what policies government should adopt to mitigate the problem and adapt."

Please note, the BBC assertion that 97 percent of scientists accept man-made climate change is hotly contested.

Media and propaganda

The NZ Herald article of 6 March 2019 referred to above includes a photograph of a young girl holding a placard stating "**You say you love your children, but you are destroying their future**" and the comment below it says "Those who persist in climate denial are being outright irresponsible to future generations".

Who is destroying whose future? The ones with the false narrative?

This indoctrination of our young children from early childhood through their teens is completely out of hand. It is known as 'Project Fear'. This is a western phenomenon by our educators and I witnessed the same on a recent visit to London where children were given time off school to create placards or have readymade placards provided to them to demonstrate outside Westminster.

It is not confined to schools either. In the 10 June 2019 edition of *Farmers Weekly*, Permanent Forests Managing Director Mark Belton, says "carbon farming and the ETS has to be sorted in the next 20 to 30 years or its game over". With a target of zero carbon, where is the extra CO_2 for the extra 200-400,000 hectares of new bush /pine planting going to come from? On this note, we pump extra CO_2 into greenhouses to make plants grow faster.

The higher the CO_2, the better our trees and our pasture will grow.

Mainstream media has lost any credibility for an unbiased commentary.

Agenda 21 (published by the United Nations - Sustainable Development)

Is the climate change debate linked to Agenda 21 as published by the United Nations?

Impact on NZ Agriculture

The impact on New Zealand agriculture is that productive land is being consumed by forestry plantings that have a lower return to the New Zealand economy. The only way that they can sustain their investment i.e. cost of land is for a cross subsidy from existing overseas investments. Furthermore, western banks are continuing their quantitative easing policies.

Secondly, it squeezes New Zealand young farmers out of a career in agriculture.

As to the financial implications, as discussed above, a tax is a tax is a tax. On this basis there is less incentive to invest in the New Zealand agricultural industry.

Conclusion

The purpose of my submission is to state that I am not in favour of any carbon tax to be put on the pastoral community of New Zealand. It is premature, the science is not conclusive and the degree of influence on climate variations has not been quantified, nor quantified for the world and/or what proportion that liability (if any) is due to New Zealand pastoral farming.

As Disraeli said, "there are three kinds of lies: lies, damned lies, and statistics".

We barely have 5 million people in New Zealand and a large pastoral flock - how do you compare that to large populations such as India and China? What is our carbon footprint relevant to?

In addition, I have provided access to information contained in my submission so that farmers can be informed. Knowledge is key and there are differing opinions, and by looking at the different opinions you can form your own and be happy with the ground you stand on.

I believe it is important to have a two way dialogue on this in New Zealand. I am very disappointed in the way mainstream media has presented a bias for human caused climate change.

I am not aware that there have been widespread meetings that have been held to discuss these climate issues. It is important to have an open discussion.

The above submission is my opinion based on the information I have read. The information and links I have included are to the best of my knowledge factual and relevant.

Document 13

Item of business :

Climate Change Response (Zero Carbon) Amendment Bill

Submission name :

Elizabeth Turner

I oppose the Bill becoming law.

I do so because;

A) Public policy involving projected massive damage to the New Zealand economy should not be made on the basis of climate models that are problematic. Even the strongest advocates of the accuracy of the models admit they are not accurate e.g. Dr Gavin Schmidt, IPCC reports, etc

Highly acclaimed scientists like Judith Curry, Roger Pielke, John Christy and Roy Spencer have produced well-researched papers pointing out the serious divergence between predictions of temperature rise and actual and why they have occurred

B) Temperatures have risen by 0.7 to 1.0 degree C in the last 50 70 years depending on location, recording methods, timing, start dates etc. There is no evidence that this temperature rise has had any detrimental effects on the weather. Why should another degree cause catastrophic conditions?

C) Almost all record of weather events since so-called warming began, show positive gains, improvements and fewer catastrophes.

D) Increases in CO2 have been highly beneficial to the world s vegetation and crop outputs, helping combat hunger.

E) If New Zealand, which produces less than 0.2% of the world s so-called man made CO2 emissions, takes drastic action and few other countries do, the detriment will be hugely exacerbated. We will become even more uncompetitive as exporters in world markets that we are reliant on more than most other countries.

F) The work output of the IPCC is largely political rather than scientific. Its very raison d etre was not to investigate climate changes in an unbiased manner but to prove the existing meme. Funds have been made available to scientists who shout the loudest about problems arising from warming even bizarre claims totally unrelated to weather or climate, while scientists wanting to offer theories and ideas in opposition have been closed down, under-funded, derided, squeezed out of their jobs etc.

G) Multiple claims made over the last 50 years have not been validated. Polar bears extinct, arctic ice disappearing, falling food production, climate refugees in NZ, no more snow, etc.

For a country as small and as dependant on international competitiveness as New Zealand, the burden of proof to enact the likes of this Bill should be absolute. The indisputable fact is that the proof is far from absolute.

Document 14

Item of business :

Climate Change Response (Zero Carbon) Amendment Bill

Submission name :

Gary Stephenson

Comments

I oppose the Bill becoming law.

The changes proposed will have a very high negative effect on the economy. The climate change models used are not accurate and many scientists disagree with the models.

Dr Gavin Schmidt, a strong advocate of the accuracy of the models admit they are not accurate. Judith Curry, Roger Pielke, John Christy, and Roy Spencer have produced well-researched papers pointing out the serious divergence between predictions of temperature rise and actual and why they have occurred.

Sea levels rise and fall and recent temperatures are atypical and cooler than the past with a minimal 0.7c rise in the past 70 years.

New Zealand produces less than 0.2% of the worlds Co2 which has yet to be scientifically proven to be a greenhouse gas. In fact without co2 plants, trees would die.
Without major economies/polluters like China and India taking the lead, any action New Zealand takes will be negated. Meanwhile, our economy will be trashed.

Recommendations

Stop the Bill becoming law. Hold China and India to account and reverse the order on no more oil exploration.

Document 15

Item of business :

Climate Change Response (Zero Carbon) Amendment Bill

Submission name :

James Turner

Comments

I oppose the Bill becoming law.

I do so because:-

A) Public policy involving projected massive damage to the New Zealand economy should not be made on the basis of climate models that are problematic. Even the strongest advocates of the accuracy of the models admit they are not accurate e.g. Dr Gavin Schmidt, IPCC reports, etc

Highly acclaimed scientists like Judith Curry, Roger Pielke, John Christy and Roy Spencer have produced well-researched papers pointing out the serious divergence between predictions of temperature rise and actual and why they have occurred.

B) Temperatures have risen by 0.7 to 1 0 degree C in he last 50 70 years depending on location, recording methods, timing, start dates etc. There is no evidence that this temperature rise has had any detrimental effects on the weather Why should another degree cause catastrophic conditions?

C) Almost all record of weather events since so-called warming began, show positive gains, improvements and fewer catastrophes

D) Increases in CO2 have been highly beneficial to the world s vegetation and crop outputs, helping combat hunger.

E) If New Zealand, which produces less than 0.2% of the world s so-called man made CO2 emissions, takes drastic action and few other countries do, the detriment will be hugely exacerbated. We will become even more uncompetitive as exporters in world markets that we are reliant on more than most other countries.

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G) Multiple claims made over the last 50 years have not been validated. Polar bears extinct, arctic ice disappearing, falling food production, climate refugees in NZ, no more snow, etc.

For a country as small and as dependant on international competitiveness such as New Zealand, the burden of proof to enact the likes of this Bill should be absolute. The indisputable fact is that the proof is far from absolute.

Recommendations

This Bill should not be progressed.

Document 16

Submission on the Zero Carbon Bill (ZCB) : July 2019

Global Warming, Reducing Emissions a Very Expensive Approach to a Non Problem : Dr Jock Allison, ONZM, (Services to Science, 2000) FNZIPIM

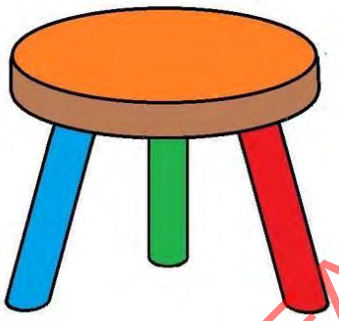
Contacts : [redacted], [redacted]

SUMMARY:

With all the present hysteria about global warming and the perceived need to commence drastic emissions reductions within 12 years, there is still no convincing scientific evidence that increasing atmospheric CO_2 is the cause of warming, nor that CO_2 is the control knob of climate. While clearly the world has warmed a little, this has been expected, as it is coming out of a little ice age.

In any discussion on climate change cogniscance of the IPCC statement "In climate research and modelling, we should recognise that we are dealing with a coupled nonlinear chaotic system, and therefore that the long-term prediction of future climate states is not possible" should be in the forefront of any consideration.

Three recent lines of research show global warming cannot be confidently attributed to human emissions. This is illustrated as a three-legged stool, and



the dis ussion points of this submission are pretty hard to refute any of them using credible scientific argument. Government and University scientists asserting in discussion of the "this does not agree with the IPCC" without any engagement on the actual science is not a credible course of action. Yet this is precisely what NZ bureaucrats and scientists say when confronted with new published science which they do not agree with.

BLUE: Water vapour is the main Greenhouse Gas – this is completely uncontroversial ; methane and nitrous oxide together account for only about 1% of warming, and anthropogenic CO_2 causes some minor warming (Allison & Sheehan 2018 – this paper appended with the submission).
https://www.nzipim.co.nz/Folder?Action=View%20File&Folder_id=120&File=The%20Journal%20September%202018.pdf

RED: Carbon dioxide (CO_2) has a half-life of only 10 years in the atmosphere, not more than 200+ years espoused by the IPCC (Berry, 2019), It is a short-lived gas.

http://www.sciencepublishinggroup.com/journal/paperinfo?journalid=298&doi=10.11648/j.ijaos.20190301.13
Further the benefits of increasing atmospheric CO_2 are not considered by Government, the IPCC, the media and the general public. The increased level of CO_2 in the atmosphere in the last 150 years has

caused a significant increase in plant growth (probably about 30%) and the "greening" of the world can easily be seen https://phys.org/news/2016-04-co2-fertilization-greening-earth.html . Why therefore would any government take action to reduce atmospheric CO2, which would diminish this present greening?

GREEN: The IPCC models, which predict 3.6 degrees C warming, + or minus 1.2 degrees (as a result of doubling atmospheric CO_2) are wrong. The correct figure is less than one third of this, 1.0 degree + or minus 0.2 degrees (Monckton et al., 2018). Monckton discusses this in a video (https://www.youtube.com/watch?v=kcxcZ8LEm2A). The actual atmospheric temperature records also agree with this assessment.

Clearly there is a requirement for an honest debate about the atmospheric physics of the warming effects of the commonly recognised GHGs, including of course the effects of water vapour, the main Greenhouse Gas. It is clear that humans can have little effect on the climate and it is naïve to think that humans through attempting to control or reduce atmospheric CO_2. The economic impact of continuing to adopt strategies towards the above strategies is huge, negative, pointless and predictable.

The conclusions of this submission do not in any way disagree with policies of cleaning up the environment and increasing the efficiency of energy use

1. Allison & Sheahen 2018

Recently Dr Tom Sheahen and I published a paper in the New Zealand Institute of Primary Industry Management Journal on the topic of the effectiveness of Greenhouse Gases (GHG),

https://www.nzipim.co.nz/Folde ?Action=View%20File&Folder_id=120&File=The%20Journal%20September%202018.pdf Pages 3-10.

A simpler representation of the work is an article published in Dairy News, 18 September 2018: https://www.ruralnewsgroup.co.nz/dairy-news/dairy-general-news/water-blamed-as-big-planet-warmer

The main points …

My co-author Tom Sheahen is a distinguished PhD in Physics who Chairs the United States Science and Environmental Policy Project (https://www.heartland.org/about-us/who-we-are/tom-sheahen), and we have been advised in the preparation of the paper by two distinguished Professors of Physics at American universities: Will Happer, an emeritus Professor of Physics at Princeton, currently a Scientif c Advisor at the White House in the USA. Prof Happer is a well recognised most distinguished scientist. see …. (http://www.sciencemag.org/news/2018/09/trump-adds-physicist-will-happer-climate-scienceopponent-white-house-staff); Professor William van Wijngaarden of York University in Canada (http://www.physics.yorku.ca/index.php/who-we-are/all-faculty/62-wijngaarden) has also been a valuable advisor re the science of atmospheric physics.

Our paper is most important because …

a) Water vapour is the most important GHG, even the IPCC accepts water vapour is responsible for more than 70% of the Greenhouse Effect, (as defined in AR4 - the 4th IPCC report)- most estimates in the literature place water vapour as responsible for more than 90% of the greenhouse effect. Most representations of the world's GHG emissions do not include water vapour – see Figure below

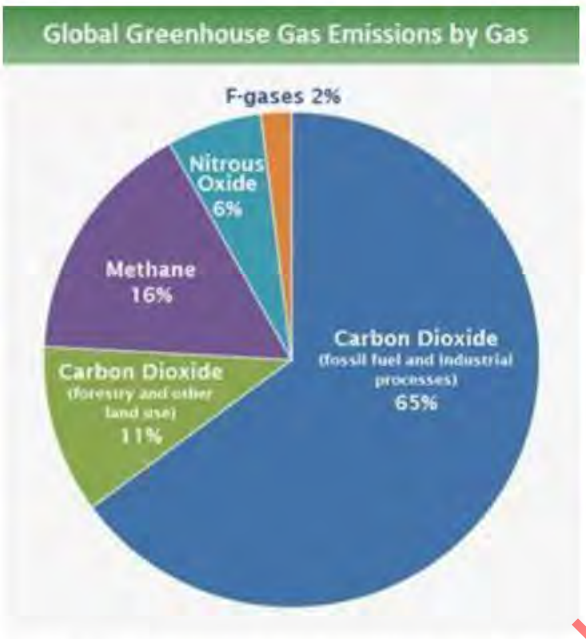


Figure 1 : World GHGs contribution to the Greenhouse Effect :
https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data

Now the IPCC (1992) also agree that water vapour is the main GHG (water vapour and clouds) and when water vapour is included we see in the next Figure that "other" gases, ie CO_2, methane, nitrous oxide and ozone, are responsible for only about a quarter of the greenhouse effect.

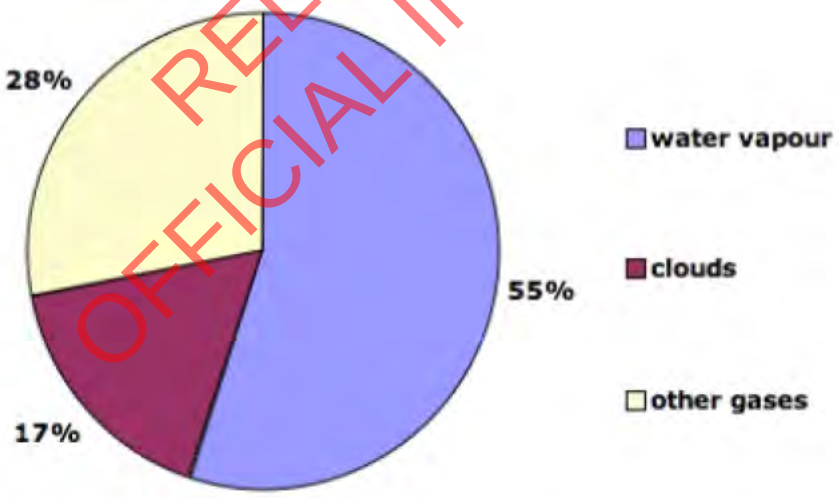


Figure 2 : Human Greenhouse Gas Emissions with water vapour included, (from a 1992 IPCC Report).

The IPCC computer models conveniently "park" the water vapour to one side and then assume that this acts as a "feedback which "amplifies the effect of the other GHGs by about 3 times. The facts are that the water vapour molecules are evenly mixed throughout the lower atmosphere, and absorb radiation coming back from the Earth's surface in all the same areas as do the other GHGs. All of the GHGs compete and interfere with each other in the same space.

b. The Greenhouse Gases, water vapour (H_2O), carbon dioxide (CO_2), nitrous oxide (N_2O) and methane (CH_4) are similar size molecules and have a similar absorptive capacity.

c. The concentration of water vapour is very small at the poles and rises to about 4% in the tropics. We have taken a for-example of 15,000 parts per million (ppm) in our paper as a working "for example" average, a conservative assumption. In the atmosphere CO_2 is 410 ppm, methane 1.8 ppm, and nitrous oxide 0.3 ppm. (Yes!, a Greenhouse Gas of only 1.8 ppm is supposedly responsible for 35%+ of New Zealand's total emissions, and N_2O at only 0.3 ppm a further 15%)

d. The relative warming effects, or Global Warming Potentials (GWP) of the various GHGs promulgated by the IPCC are CO_2 = 1; Methane = 28; and Nitrous Oxide 260 -300. This is clearly nonsense. Tom Sheahen addresses this in "How to Deceive With Statistics : Distortions With Diminutive Denominators" see https://www.americanthinker.com/articles/2018/01/how_to_deceive_with_statistics_distortions_due_to_diminutive_denominators.html .

Further Allen et al (2018) conclude that methane as a short-lived gas (totally unaccounted for as a short-lived gas in IPCC reports) and has a minimal effect only as a GHG. Professor David Frame at Victoria University is a co-author, and his advocacy has had some effect on NZ Government policy. These authors agree with the conclusions of Allison & Sheahen, that methane is a minor contributor only to any warming, but the fact that they include the IPCC Scenario GCM Models in their calculations is of concern. Again as with the IPCC it is clear that they have little understanding of atmospheric physics.

The IPCC ignores water vapour as a participant in the competition / interference to absorb photons of heat radiated back from the earth. As noted previously the Computer models conveniently "park" the water vapour molecules (like Humpty Dumpty on a wall) and then bring them back in via a mathematical calculation assuming an amplification effect of about three times. Simply, this is not how the atmosphere works, water vapour is well mixed and all of the GHG molecules are in the same situation competing to absorb the heat from the sun, radiated back from the earth's surface.

e. The Earth is not heating up dramatically as suggested by government science, the media and the many local government declarations of "climate emergency" around New Zealand, and world-wide. There has been about 0.8 to one degree warming in the last 150 years as the world comes out of the Little Ice Age. Over the past couple of decades there has been little warming (see https://judithcurry.com/2015/12/17/climatemodels-versus-climate-reality/). The observed warming is not unusual in comparison with recent well documented warm period such as the Minoan Warm Period, Roman Warm Period and the Medieval Warm Period, see Figures 3 and 4 below. Clearly the world's climate is not unusual, and for only about 10% of geological time (the last 600 million years) has it been as cool as it is today …….

https://i.stack.imgur.com/HxERL.png

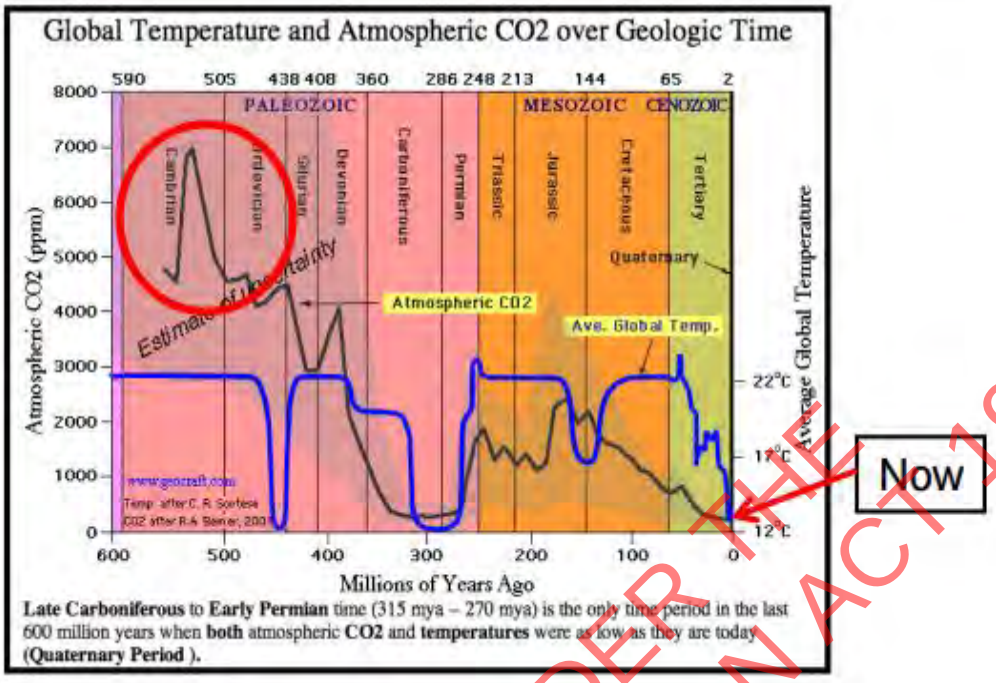


Figure 3 : World temperature and CO2 levels over Geological Time

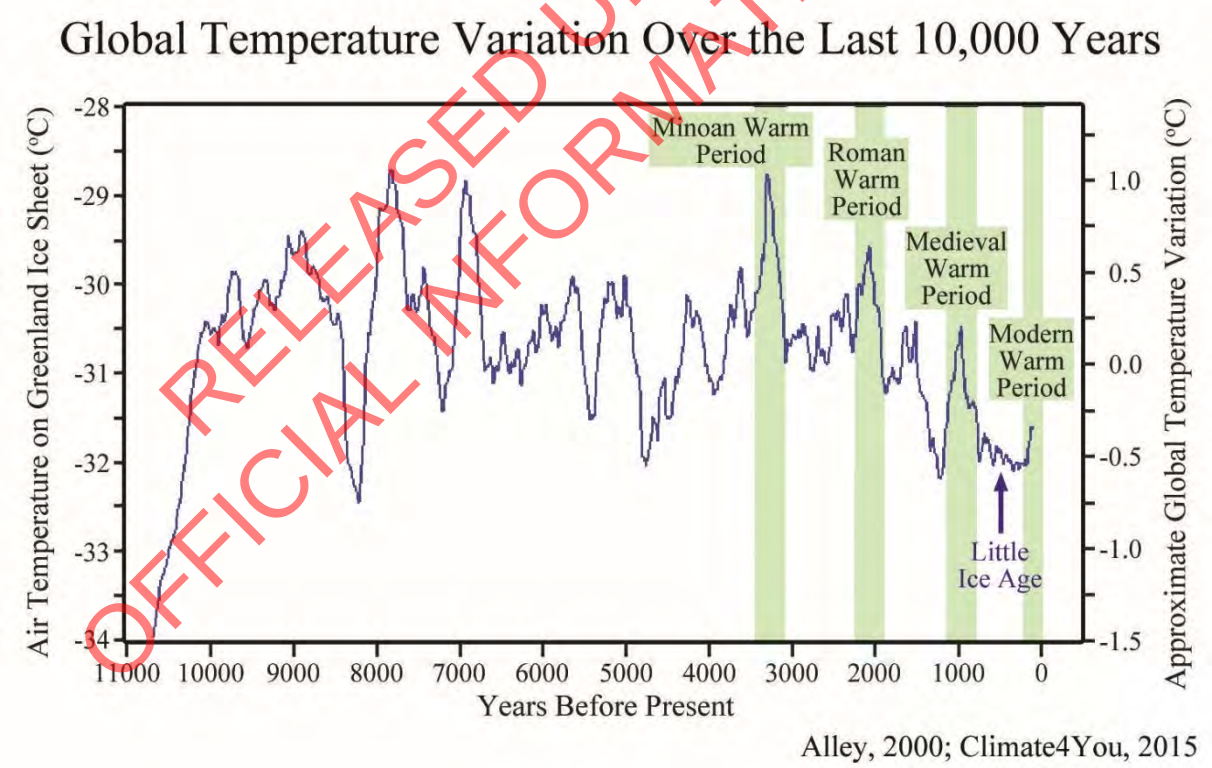


Figure 4 : Most of the last 12,000 years has been warmer than today, all without significant fossil fuel use. Data from Greenland Ice Cores.

Only in the last 150 years have fossil fuels been a factor in the world's emissions, huge fluctuations in world temperature due to "natural variation" have occurred in the past 12,000 years. "Natural

variation" in temperature and climate seems to have departed the consideration of most advocates of climate change where now, almost every adverse weather event is blamed on climate change.

The two Figures below show the world temperature record measured by satellites or balloons, in the lower atmosphere. These are the most accurate measure of temperature, which unlike the surface temperature records:

i) cover almost the whole globe, unlike the land-based temperature records, which cover about 25% of the globe only.

ii) doesn't have the biases of the predominantly "urban"-based temperature records that have the well-known UHI (Urban Heat Island) effects from the build-up of heat in concrete, asphalt etc., which makes nights warmer in urban areas

iii) are not subjected to continued corrections, many of which have years later been imposed in statistical treatment of surface station data resulting in an accentuation of warming trends.

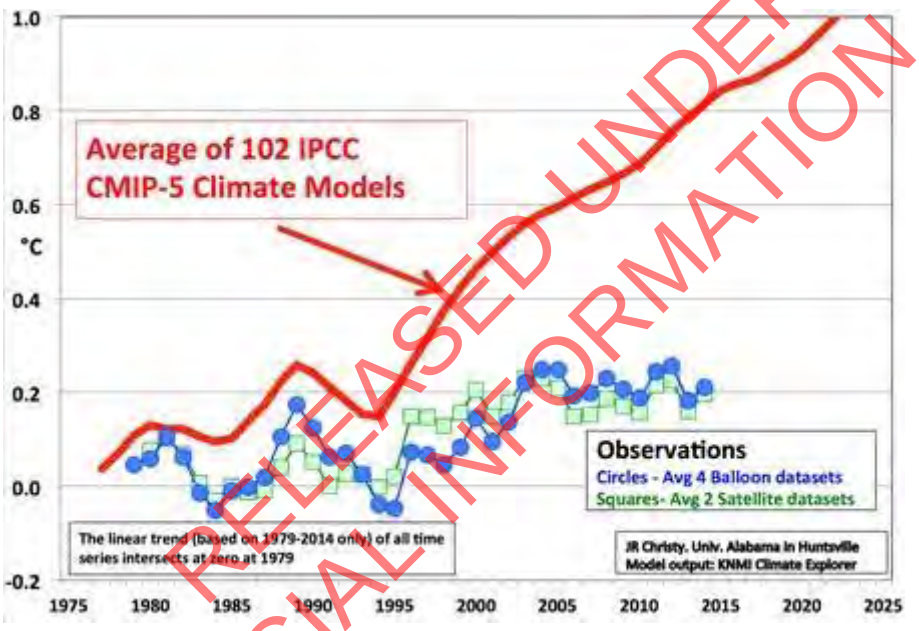


Figure 5 : Satellite and balloon atmospheric temperature, real data versus Climate Computer Model Estimates.

A further illustration of the trophospheric temperature from satellites and balloons is in the figure below. Apart from two significant EL Nino spikes in 1998 and 2016, temperatures are not rising markedly (http://www.drroyspencer.com/).

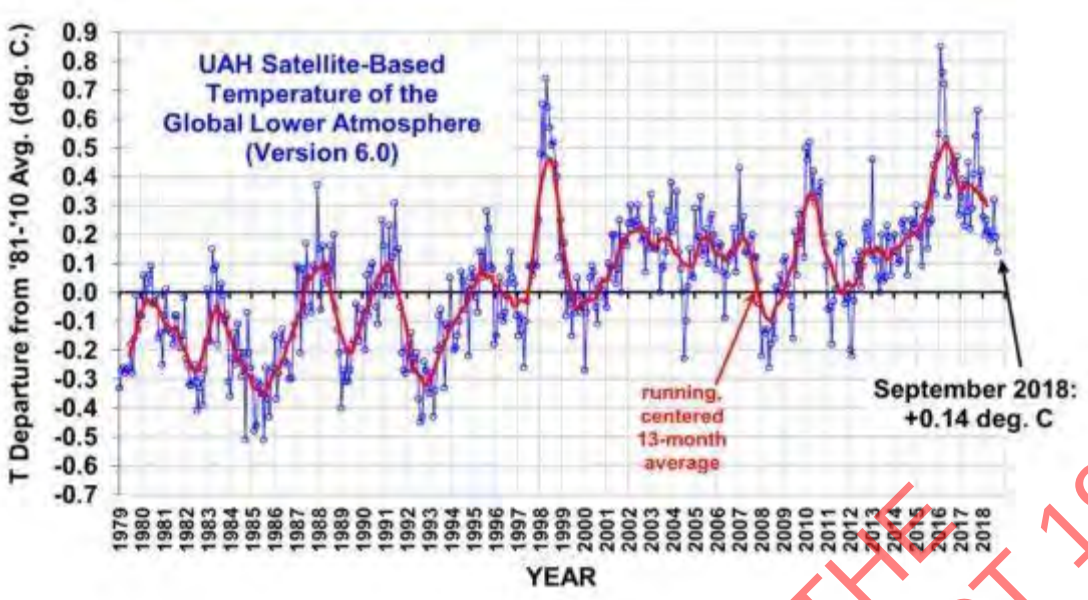


Figure 6: The satellite and balloon record of atmospheric temperatures from 1979 :

There has been a modest warming since 1979, but only at a fraction of the rate suggested by the Computer Models upon which all of the climate / warming concern is based. Certainly very little warming in the last two decades.

The IPCC Computer Models are clearly not working, they are running very hot, . From February 2016 to September 2018, the atmospheric temperature has dropped by 0.7 degrees C.

Methane and nitrous oxide are able to absorb heat only in an area of the electro-magnetic spectrum where there isn't a huge amount of heat emitted from the earth, and where there is almost total saturation of water vapour (remember methane 1.8 ppm versus water vapour 15,000 ppm) – see diagrams in the Allison & Sheahen paper.

We conclude, therefore, that particularly methane and nitrous oxide (reputedly responsible for about half of New Zealand's emissions) are very minor contributors only to any global warming effect. These gases should therefore be removed from New Zealand's GHG Inventory, or at the very least included at a level commensurate with their real effect.

This is very important information, particularly when our politicians say they want all policy to be "evidence based", and yet they are convinced that global warming / climate change is real, and that humans cause it. Clearly this is incorrect.

New Zealand scientists Drs Andy Reisinger and Harry Clark from the Agricultural Greenhouse Gas Research Centre at Palmerston North (AGGRC) have been publishing information contending that methane from livestock can be responsible for up to 25% of the world's warming. https://onlinelibrary.wiley.com/doi/pdf/10.1111/gcb.13975

Methane from ruminants is only about 16% of all the methane going into the atmosphere – see Figure 7 below.

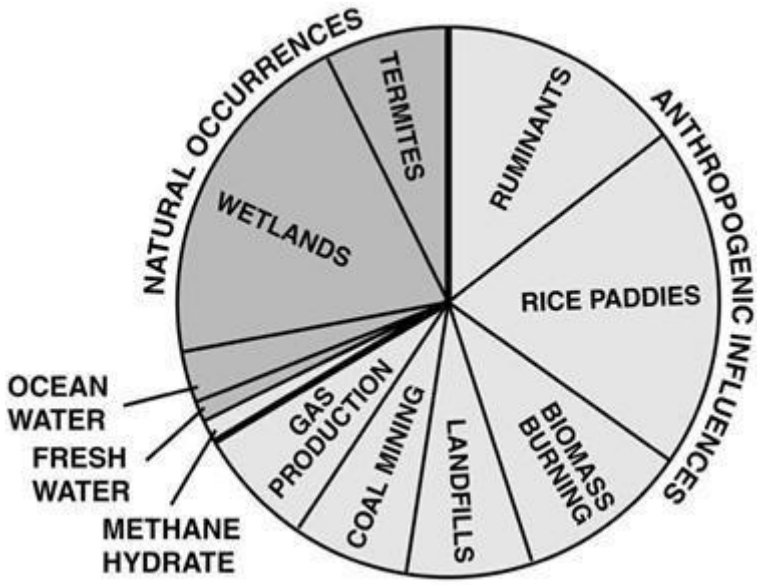


Figure 7 : Sources of atmospheric methane. Ruminants are cattle, sheep, goats etc. 2/3 of the total is due to human activities.
https://www.giss.nasa.gov/research/features/200409_methane/

In New Zealand methane and nitrous oxide are assessed as about 50% of our total emissions (excluding water vapour). Our paper, (Allison & Sheahen, 2018) shows that these gases have a minimal GHG effect, so small to be almost irrelevant in GHG effect in the atmosphere. New Zealand concentrating on these gases, and modelling and then planning the reductions that need to be made to have various effects in the future is meaningless:

a) The way the GWP values are calculated is scientifically unsound, and the derivation of the high values have been discredited as a result of faulty calculation.

b) The putative reductions required for methane from cattle in New Zealand come from only 16% of total methane emissions on the planet see Figure 7. Anthropogenic sources of methane account for 67% of all methane emissions into the atmosphere, ruminants making up about 15% of the total, or 22% of the anthropogenic share. Now methane is 16% of the anthropogenic emissions (excluding water vapour, see Figure 1) or 3.5% of the total. If now we take water vapour into account, and conservatively use this as 80% of the total Greenhouse Effect then methane = 0.7% of the total Greenhouse Effect. Similarly, nitrous oxide considered to be about 37% of the effect of methane (Figure 1), = 0.26% of the total Greenhouse Effect.

c) Methane and nitrous oxide therefore not more than 1% of the total Greenhouse Effect, when represented by the IPCC and governmental scientists as up to 25% of the world anthropogenic GHG contribution, and in fact about 50% of NZ's emissions.

d) Reisinger & Clark estimation that animal emissions of methane and nitrous oxide could be responsible for up to 25% of the world's warming shows that computer models can be made to say anything the author(s) like?

e) **Thus we overestimate our country emissions for methane and nitrous oxide by about 25 times (see the next section on CO2 emissions). We have had a comprehensive, expensive**

and totally inaccurate debate re GHG emissions particularly for the agricultural sector based on totally erroneous assumptions. To pass laws where New Zealand starts to pay for carbon emissions based on a yet undetermined carbon price, based on such over-estimates is economic suicide.

f) If we consider that cattle make up about 85% of total estimated world ruminant emissions, and the developed countries make up about 25% of the total cattle numbers, and then account for the removal of the USA from the Paris Agreement, this means that the developed world has about 14% of the numbers which might be assessed for accounting for agricultural GHGs. About 75% of the world's cattle and sheep are in undeveloped countries, which under the Paris Agreement 2015, are not expected to significantly reduce emissions until after about 2030, or at such time that each country has developed sufficiently to raise the standard of living of its population to a level that would deem it to be classified as "developed".

Further Article 2, 1 of the Paris Agreement states …….

1. This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by :

   a) Holding the increase in the global average temperature to well below 2 degrees C above pre-industrial levels and pursuing efforts to limit the increase in temperature to 1.5 degrees C above pre-industrial levels, recognising that this would significantly reduce the risks and impacts of climate change.

   b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production, and

The topic **"In a manner that does not threaten food production"** is a whole new arena for discussion particularly relevant to New Zealand, where the carbon footprint (emissions / unit of production) are lower than anywhere else in the world. Certainly, it is implied in the simplest of terms that policies resulting in reduced food production should not be considered in climate change responses. There is no indication that Government and industry has or is considering the implications of Article 2, 1 of the Paris Agreement??

New Zealand with only about a 1% numerical share of the world's cattle, and less than 3% of the total world ruminant emissions, means that our agricultural industry is responsible for about 0.5% of the world s methane going into the atmosphere (see Figures 1 and 7).

Thus making allowances for ruminant emissions in New Zealand when no such recognition at all of 65% to 70% or more of total world ruminant emissions is being made, let alone financially accounted for and accordingly paid for, will likely have significant negative effects on all economic indicators in our economy. All this achieved without having any possible effect on the world's warming and or climate. This can be recognised as only "virtue signalling". Potentially, New Zealand will be paying billions of dollars or spending billions of dollars on other activities to alleviate a tiny percentage of world ruminant emissions, when most flocks and herds will not only, not be measured, but also will not be assessed as part of "other country" commitments.

The world will be unable to reduce emissions anyway?

The effectiveness of the world in reducing CO_2 emissions since the Kyoto Protocol negotiations started, is sobering considering the heroic assumptions now being made by the IPCC with regard to what the world might achieve in GHG reductions in the future, required so temperature increases of 1.5 or 2 degrees C respectively, might be avoided. Whether one agrees with the policy of reducing CO_2 emissions or not, world countries have shown that they either have no intention of reducing emissions or have little intention so to do.

From 1990, the baseline date for Kyoto, the world's total anthropogenic emissions increased by 60% to 2013, were then pretty stable in 2014, 2015 and 2016, but increased again by 1.6% in 2017, and a significant 2.7% in 2018. Under the Paris 2015 Accord, "Developing Countries", which are now responsible for 62% of the world's emissions, are allowed to keep developing while they improve standards of living for their populations. China has signalled it will double emissions by 2030 (+29.5% of world emissions now), and India has signalled it will increase 3X by the same date (+13.6%). The other undeveloped countries can be expected to increase total world emissions by at least 10% by 2030 as they try and improve the standard of living. With such a scenario the world is looking at about a 55% increase in world emissions from the presently designated undeveloped countries by 2030.

Further, with the USA out of the Paris Accord (14.5%), that leaves 23.5% of presently estimated emissions for the developed countries who are supposed to committing to rigorous emissions reductions scenarios. Not to mention also they are supposed to proportionately support a $US100 billion Green Climate Fund each year from 2020. **This will not happen.**

Clearly the path to mostly renewable energy by 2030 or 2050 is not achievable. The world is still relying on fossil fuels which still make up more than 80% of total world energy use. Further, the academic IPCC reports never factor in the benefic al effects of CO_2, (increased plant growth) or take note that perhaps half of the world's food is produced with the help of fossil fuel derived fertilisers.

All of this shows just how removed from reality governmental bureaucrats, politicians and scientists are when promoting the huge reductions in the world's emissions in a much shorter timeframe be it 2030, or 2050.

If we take these data on achievement above back to our very small example here in New Zealand with supposedly only 0.17% of the world's emissions, the spending billions on emissions reductions to control climate change doesn't seem to make much sense from any viewpoint. Anything New Zealand will spend on "climate change" will be a total waste of money (which, as a country below halfway down the OECD's income / capita tables, we don't have) and will have no effect on climate / warming. Further, most of the developed countries that are the most bullish about the need to take action about climate change – the EU, for example – are all already falling behind their ambitious GHG reduction targets. See …
https://www.washingtonpost.com/world/2018/10/11/few-countries-are-meeting-paris-climate-goals-here-are-ones-that-are/?utm_term=.4222f6520a8b

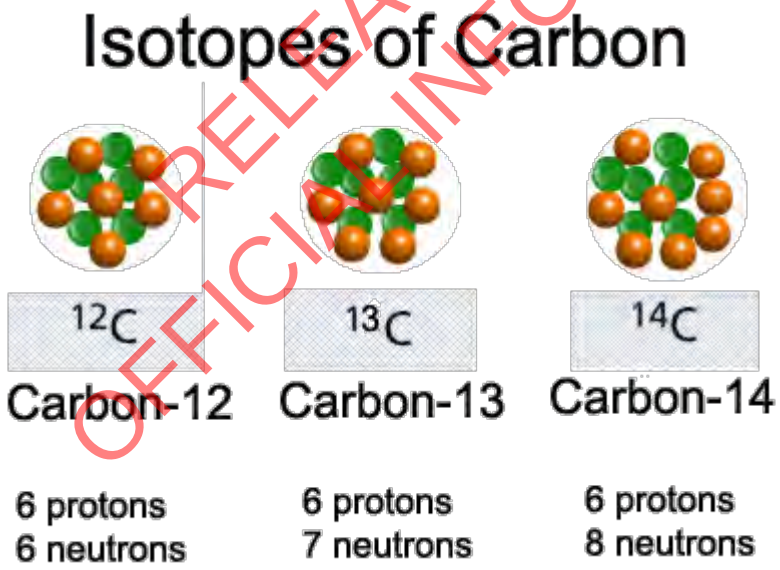
2. The next big thing in Climate Change Research : CO2 is a Short Lived Gas

There is a fatal flaw in Climate Change Research regarding the human effects on the percentage atmospheric CO_2 and how long CO_2 stays in the atmosphere : Dr Ed Berry has had a distinguished career in climate physics see https://edberry.com/exb/dr-ed-berry/

The whole of the global warming world scare is predicated on the assumption that anthropogenic emissions of CO_2 resulting in an increased and increasing concentration of CO2 in the atmosphere are causing the world to warm. Further, CO_2 is claimed by the IPCC to have a long half-life in the atmosphere, with some claims that 15% of human emissions stay in the atmosphere for ever. Such claims indicate an astonishing ignorance of atmospheric physics. This is the belief of the United Nations and the IPCC, and as almost all countries have signed up to this belief – Rio Earth Summit 1992, through to the Paris Agreement 2015, making Global Warming / Climate Change / Climate Disruption now Government Policy throughout the world. **Nothing could be further from the truth.**

Dr Berry has developed a model for the flows of CO_2 in the atmosphere, based on the decay / disappearance rates of radioactive C_{14} CO_2 in the atmosphere after all the nuclear testing in the Pacific and elsewhere. He has recently published a paper …… http://www.sciencepublishinggroup.com/journal/paperinfo?journalid=298&doi=10.11648/j.ijaos.20190301.13 the main conclusion of which is "**That human CO_2 makes an insignificant increase in the natural level of atmospheric CO_2 and, therefore, nature, not human CO_2, is responsible for changing the climate"**

These data on the rate of disappearance of labelled CO_2 in the atmosphere define for us the situation for normal C_{12} CO_2 (note: carbon has a molecular weight of 12, with 6 neutrons and 6 protons in the nucleus, while C_{14} has 6 protons and 8 Neutrons formed as a consequence of nuclear explosions in the atmosphere. See diagram below)



C14, in the atmosphere as C14 CO_2, will react chemically and physically in the same way as the normal carbon in the atmosphere C_{12}. Therefore, C_{12} CO_2 has the same half-life (rate of disappearance) from the atmosphere as the C_{14} CO_2. Also, there is no way to differentiate between the CO_2 from human

activities, i.e. burning fossil fuels, and all other natural sources of CO_2 going into the atmosphere at any time. i.e. more than 95% of CO2 going into the atmosphere is from natural sources.

In the years 1946 to 1962 there was an increase in C_{14} in comparison with C_{12} (the carbon in CO_2), in the atmosphere. C_{14} is an isotope and has a molecular weight of 14 from the addition of two additional neutrons to the nucleus of the C atom, this being caused by the atomic explosions in the atmosphere. (https://edberry.com/blog/climate-physics/agw-hypothesis/preprint-a-fatal-flaw-in-global-warmingscience/)

Figure 8 below shows the rate of disappearance of C_{14} CO_2 from the atmosphere after 1960 from two sites, one in New Zealand, one in Austria. The atomic explosions in the Pacific gave a very elegant way of labelling an injection of CO_2 into the atmosphere , and subsequent recording of the rate of disappearance assumed to be mainly through uptake by plants and the oceans.

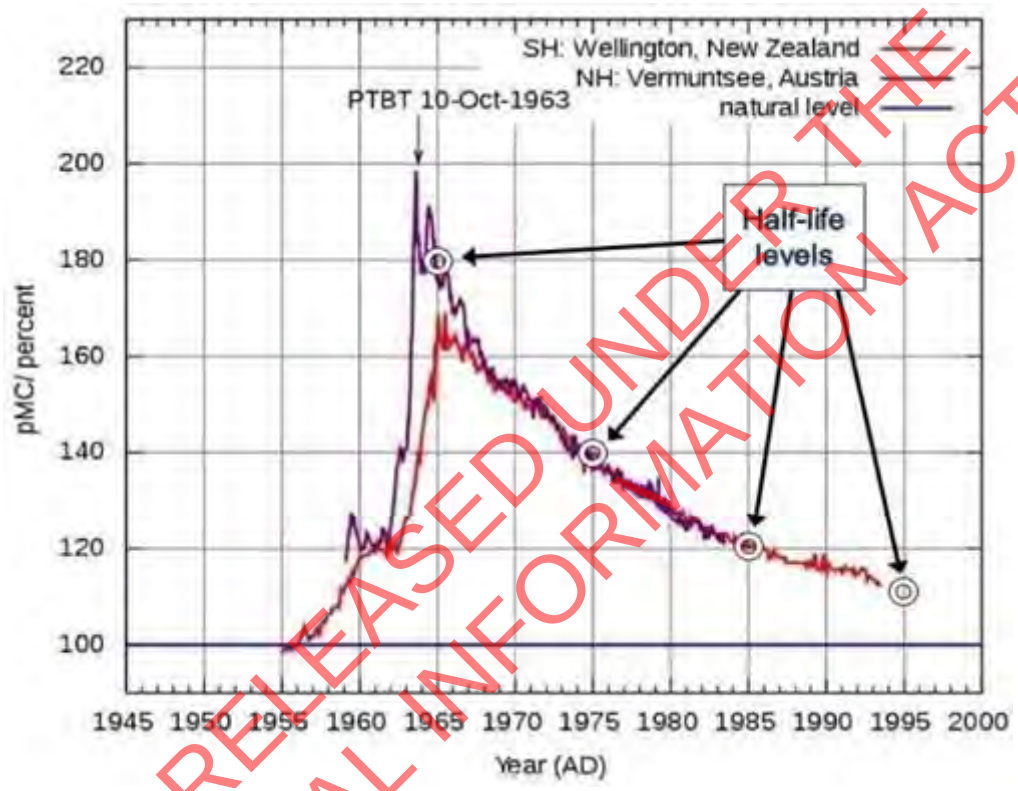
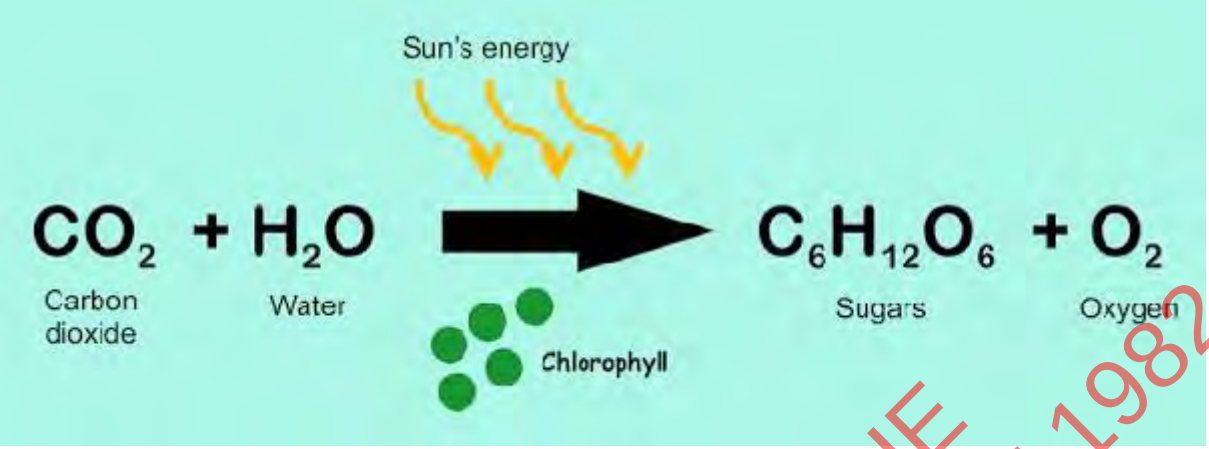


Figure 8 : **C_{14} data before and after the above-ground atomic bomb tests. The natural concentration of C_{14} CO_2 is defined as 100%. The pMC percent scale is "percent of modern carbon" where "modern carbon" means the level in 1950. The white circles mark the half-life times.**

The concentration atmospheric C_{14} CO_2 halves every 10 years, then so too will the other C_{12} CO_2 which make up the majority of all CO_2 in the atmosphere.

CO_2 is, in effect, plant food, and the higher the concentration in the atmosphere, the faster plants grow, and also with greater water use efficiency. The chemical equation is shown below:

Figure 9 : Photosynthesis in plants which use atmospheric CO_2, water and sunlight to synthesise sugars



For most of geological time, CO_2 levels in the atmosphere have been much higher than the present day, for millions of years in the range of 2,000 and upwards. A level of more than 150ppm is required for plants to grow at all, and as the concentration increases, plants grow faster. If the level of atmospheric CO_2 was to double, then plant growth worldwide would increase by about 30%. Significant "greening" can be observed worldwide already from space – a result of the 45% increase in atmospheric CO_2 since pre-industrial times. This is an outstanding result for the Earth, not the impending disaster of rising CO_2 widely promoted

https://www.nasa.gov/feature/goddard/2016/carbon-dioxide-fertilization-greening-earth

It is generally agreed that only 5% of CO_2 added to the atmosphere during each specified time period is from human sources (probably a bit less).

This is a very different situation from that which the IPCC claims (including New Zealand scientists advising the Government). The IPCC claims:

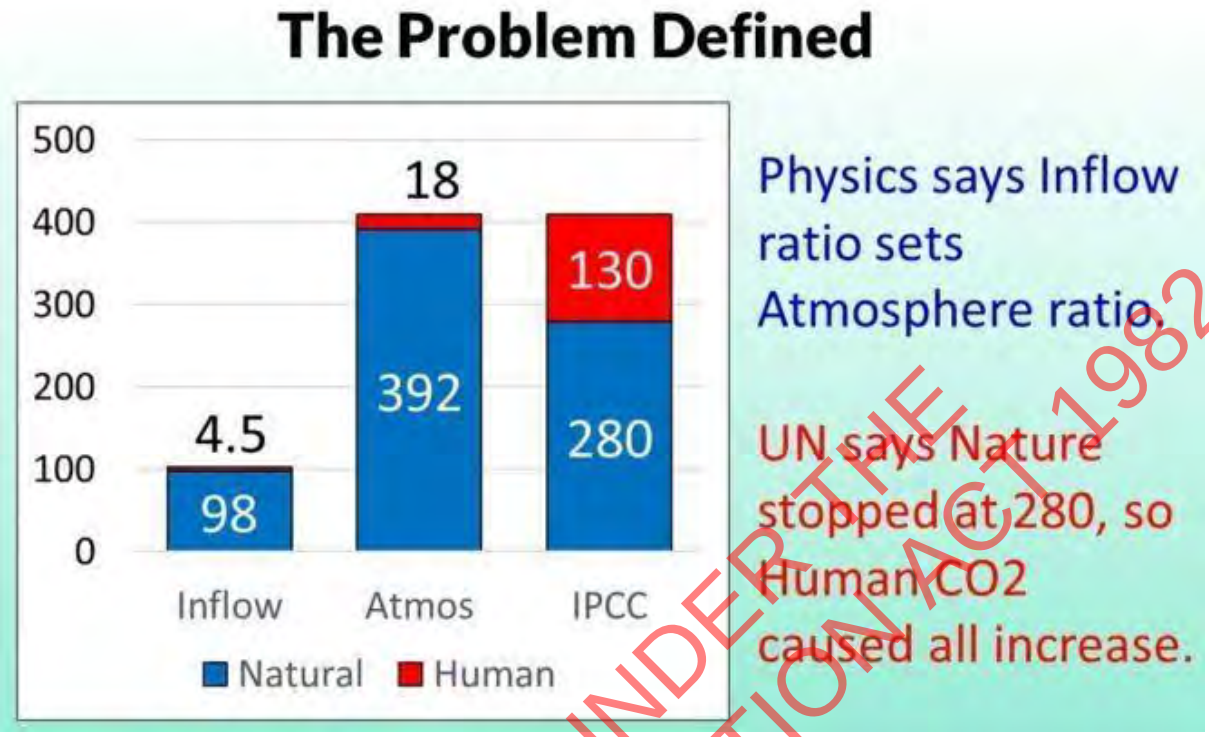
a) **all of the rise in atmospheric CO_2 from 280 ppm (pre-industrial, about 1850) to 410 ppm today is due to human activities**
b) **the half-life of CO_2 (i.e. C12 CO_2 which makes up about 99% of the CO_2 in the atmosphere) is 200+ years or more, often quoted to be more than 1,000 years**
c) **15% of human CO_2 will stay in the atmosphere forever, …….**

These are all wrong.

The latest science from Dr Ed Berry shows that as a result of applying the climate physics embodied in the C_{14} decay graph above, human CO_2 cannot be responsible for all of the CO_2 increase in the atmosphere since pre-industrial times.

On this basis, therefore, human CO_2 cannot possibly be the "control knob" of global warming. Any efforts to diminish atmospheric CO_2 through emissions reduction programmes cannot be expected to have any demonstrable effect on the climate.

The calculated levels of CO_2 from the decay rates defined from the study of the C14 after nuclear testing gives the results illustrated in the graph below:



So, the human activity-derived CO_2 in the atmosphere presently is 18ppm, not the 125ppm from human activity from 1850 as the IPCC contends. The data concerning rates of disappearance of C_{14} from the atmosphere have been published previously, but not considered re the application to climate change and atmospheric physics. To summarise ……

a) **human-derived CO_2 emissions adding only 18ppm to the atmosphere can make little difference to warming and or climate change**
b) **reductions of the human-derived emissions will not make anything but a miniscule effect on temperature,**
c) **human-derived CO_2 emissions into the atmosphere are of little significance to temperature, i.e. global warming / climate change / climate disruption**

3. IPCC Climate Models Overestimate Warming by Three Times :

The third part of this three-legged stool is analysis of the GCM Climate Models, work that Lord Christopher Monckton and a few others have been doing for a very long time. The GCM Climate Computer Models are supposed to represent the physical processes in the atmosphere, ocean, cryosphere and land surface, and are purported to be the most advanced tools to simulate the climate response to increasing levels of GHG concentrations in the atmosphere.

Clearly the models are spectacularly unsuccessful in estimating warming, as seen in Figures 5 and 6. Yet surprisingly it is these alarmist scenarios for world warming that have been adopted virtually without question by world governments and the media. Lord Monckton has over several years been working on the mathematics behind the assumptions in the GCM Models. They have found .....

a) the IPCC estimate that Equilibrium Climate Sensitivity (ECS, or the expected temperature increase from the doubling of atmospheric CO_2) is 3.6 degrees C + or minus 1.5 degrees C,

b) after allowing for the omission in the IPCC models (as Monckton put it "they forgot about the sun" - in fact the feedback to the incoming solar radiation), the ECS is only 1 degree C + or minus 0.2 degrees C. So, no problem. The problem of climate change has disappeared. An increase in temperature of another one degree, most of which we have had already is really quite beneficial.

c) The result from the allowance for the feedback in b) above agrees with the data in Figure 5. The summary of the ESC estimated from the Climate Computer Models, the IPCC and reality is depicted in the chart below.

If it is accepted that the Global Warming / Climate Change / Climate Disruption scare is over based on the information contained within this submission, then a very large number of jobs, established science institutions, governmental departments and university departments, plus the finance to run these is at stake worldwide. Clearly the information presented with this submission doesn't agree with the so-called conventional wisdom or consensus. However, the discussion is really about atmospheric physics, Lord Monckton presented the results at an International Conference in Portugal in July 2018 and has submitted the paper for publication in a climate science journal. A more detailed Monckton et al paper can be supplied on request.

Certainly an arrogant response "that your data do not agree with the findings of the IPCC" as has been proffered by several local scientists, not an acceptable scientific discussion.

Government would be sensible to open up the debate and include international experts to confirm whether or not "the science is settled" as the climate change establishment and governments frequently assert. The present climate belief system has more to do with politics than science, and the assertions of senior UN officials "that the whole climate change process is a complete transformation of the economic structure of the world" – Christine Figueres.https://www.theaustralian.com.au/commentary/climate-change-signals-part-of-socialist-plot/news-story/a29d692e6efed92606cdf4e56315c0be

Let's sort the science out, and not commit to unnecessary expenditure which will have little effect on either the levels of atmospheric CO_2 or the climate.

The Climate Change Response (Zero Carbon) Amendment Bill is a selfish political indulgence, especially to humour the minority interest Green Party.

It will cost our country billions and greatly damage the business and working lives of our people. Our poorest will suffer the most, many being forced into the welfare trap.

This is a Political Crisis rather than a Climate Crisis.

For example: The Washington Post reported 10.7.19: Saikat Chakrabarti, the chief of staff for Rep. Alexandria Ocasio-Cortez (D-NY) (leading "Socialist" in USA Congress) had an unexpected disclosure. "The interesting thing about the Green New Deal, is it wasn't originally a climate thing at all ..... we really think of it as a how-do-you-change-the-entire-economy thing."

For a scientific view in line with leading weather scientists, Jyrki Kauppinen and Pekka Malmi, from the Department of Physics and Astronomy, University of Turku, Finland, in their paper published on 29th June 2019 say the major part of the extra CO2 is emitted from oceans. During the last hundred years the temperature has increased about 0.1 degrees because of CO2. The human contribution was about 0.01 degrees.

The Climate Crisis is no doubt based on the opinions of a number who understand climate science. But mostly it is driven by bullying anti-western activists, together with organisations and individuals too weak to withstand the bullying and hysteria. It is also driven by the $US1.5 trillion Global Warming industry (see Climate Change Journal).

Our politicians should have the courage to put our people ahead of the desire to be in with the political in-crowd. Otherwise, it will be up to voters to reject paying this high price.

Following is a summary of key points from climatologist Richard Lindzen, 30 year professor of atmospheric sciences at Massachusetts Institute of Technology. Richard Lindzen has a deep understanding of both the science and of University politics.

- "Overwhelming evidence" is in fact the accumulation of false and/or misleading claims.

- The "97% scientist agree" meme. A thorough debunking has been published in The Wall Street Journal by Joseph Bast and Roy Spencer.

- The "warmest year on record" Meme. Temperatures have remained constant since 1998.

- Temperatures have increased approx. one degree since the little ice age 200 years ago.

- Climate alarmists wish to eliminate the Medieval Warm Period since it demonstrates that warming has occurred in the past

- The "Extreme Weather" Meme. Professor Roger Pielke (University of Colorado) has written a book showing there is no increase in extreme events.

- Extreme Weather as evidence of Climate Crisis. In fact, warmer world temperatures would even things out reducing the sources of extreme weather.

- Ocean Acidification. The sea is in fact basic rather than acidic. See Dr Patrick Moore's "Ocean Acidification Alarmism in Perspective"

Patrick Moore is the founder of Greenpeace, now ostracised for being off-message

- Bleaching of Great Barrier Reef Coral. Another phony crisis with coral having substantial capacity to handle varying conditions.

- Sea levels projected to rise dangerously. Sea levels have been rising at a steady rate of about 8 inches pa for hundreds of years

- Scientists are not pure hearted seekers of knowledge. Just some examples are Michael Mann's infamous hockey stick graph or the Climategate emails and suppression of opposing views.

- Everyone has their political bias. Scientists, like most academics, don't live in the real world and are typically "Socialist" in their views. They use their status to promote their views.

- It would be career suicide for a young academic to resist the Climate crisis narrative. Academic success depends mainly on pleasing professors and passing exams.

- Alarmism is common. For instance, Nation magazine published a cruel hearted article "The other poison gas killing Syrians: Carbon Dioxide"

- Remote possibilities are used to promote extreme actions.

- Climate Action for the most part has done more harm than good.

- Ours and the world's poor will suffer the most.

- The promoters are typically comfortable urbanites and less likely to suffer the costs.

- The Science: Weather is a complex system based on turbulent oceans and air. Strong heating at the equator and freezing at the Poles causes vast energetic ramifications.

- Water forms 98% of the greenhouse effect. The human contribution of CO2 is a small part of the system.

- The Science is far from settled in respect of these highly complex weather systems. It is magical thinking to say human CO2 has a big part in this system.

- Few understand the complex science, but many think it's all very simple.

- It is more Politics than Science.

For example, Sweden's Prime Minister Olaf Palmer, in trying to promote nuclear energy, demonised coal.

Christiana Figueres, executive secretary of UN Framework Convention on Climate Change, said mankind was setting itself the task of intentionally changing the economic system.

Summary

All these points are taken from Richard Lindzen's presentations

https://www.thegwpf.org/content/uploads/2018/10/Lindzen-2018_GWPF-Lecture.pdf

https://link.springer.com/article/10.1007/s12129-017-9669-x

Richard Lindzen, is just one of many world leading climate scientists who reject the scaremongering.

Document 18

Item of business :

Climate Change Response (Zero Carbon) Amendment Bill

Submission name :

Mark Jones

Comments

I oppose the Bill becoming law.

I do so for the following factors.

A) Public policy involving projected massive damage to the New Zealand economy should not be made on the basis of climate models that are problematic. Even the strongest advocates of the accuracy of the models admit they are not accurate e.g. Dr Gavin Schmidt, IPCC reports, etc

Highly acclaimed scientists like Judith Curry, Roger Pielke, John Christy and Roy Spencer have produced well-researched papers pointing out the serious divergence between predictions of temperature rise and actual and why they have occurred.

B) Temperatures have risen by 0.7 to 1.0 degree C in the last 50 70 years depending on location, recording methods, timing, start dates etc. There is no evidence that this temperature rise has had any detrimental effects on the weather. Why should another degree cause catastrophic conditions?

C) Almost all record of weather events since so-called warming began, show positive gains, improvements and fewer catastrophes.

D) Increases in CO2 have been highly beneficial to the world s vegetation and crop outputs, helping combat hunger.

E) If New Zealand, which produces less than 0.2% of the world s so-called man made CO2 emissions, takes drastic action and few other countries do, the detriment will be hugely exacerbated. We will become even more uncompetitive s exp rters in world markets that we are reliant on more than most other countries.

F) The work output of the IPCC is largely political rather than scientific Its very raison d etre was not to investigate climate changes in an unbiased manner but to prove the existing meme. Funds have been made available to scientists who shout the loudest about problems arising from warming even bizarre claims totally unrelated to weather or clim te, while scientists wanting to offer theories and ideas in opposition have been closed down, under-funded, derided, squeezed out of their job etc.

G) Multiple claims made over the last 50 years have not b en validated. Polar bears extinct, arctic ice disappearing, falling food production, climate refugees in NZ, no more snow, etc.

Recommendations

That further research into thee following Research already done and their reports.

https://www.thegwpf.org/content/upl ads/2017/03/Climate Science-March20171.pdf

https://static1.squarespace.com/static/579892791b631b681e076a21/t/5c6c2c044e17b60436d9cbf4/1550593045078/Climate+Science+Update%2C+Feb+08%2C+2019.pdf

Any research from Dr Tim Ball nd you tube videos of interviews, speaches and debates

https://www.youtube.com/watch?v=ksMYjzWSlI4

https://www.youtube.com/watch?v=dcdPM5FY8Ug

https://www.youtube.com watch?v=_sbo8Ods8M0

https://www.youtube.com/watch?v=Owm25OHGglk

There is far more info if you actually wish to look and read.

REMEMBER CLIMATE CHANGE IS NOT POLLOUTION AND HAS NOTHING TO DO WITH WASTE PRODUCTS, THAT IS RECYCLING.

If you do not include or view or read any of this information then your decision is invalid to the NZ public.

Submission against the Climate Change Response (Zero Carbon by 2050) Amendment Bill

Submission made by Rob Colmore

To Propose a Zero Carbon Bill into Parliament to shape our Country's future for the next 30 years based on a belief that we can remove one of the fundamental building blocks of nature, namely Carbon, is I believe, Folly. Carbon is on the periodic table of elements.

What is Carbon ?

Carbon is the 15th most abundant element in the Earth's crust, and the fourth most abundant element in the universe by mass after hydrogen, helium, and oxygen. Carbon's abundance, its unique diversity of organic compounds, and its unusual ability to form polymers at the temperatures commonly encountered on Earth enables this element to serve as a common element of all known life. It is the second most abundant element in the human body by mass (about 18.5%) after oxygen.

Carbon is essential to all known living systems, and without it life as we know it could not exist. The major economic use of carbon other than food and wood is in the form of hydrocarbons, most notably the fossil fuel methane gas and crude oil (petroleum). Crude oil is distilled in refineries by the petrochemical industry to produce gasolene, kerosene, and other products.

Carbon is a key component of all known life on Earth, representing approximately 45-50% of all dry biomass. Complex molecules are made up of carbon bonded with other elements, especially oxygen and hydrogen and frequently also with nitrogen, phosphorus and sulfur. Carbon is abundant on Earth. It is also lightw ight and relatively small in size, making it easier for enzymes to manipulate carbon molecules. It is frequently assumed in astrobiology that if life exists elsewhere in the universe, it will also be carbon-based. Critics refer to this assumption as carbon chauvinism.

We are continually told that Carbon and Carbon Dioxide is bad for the environment, when nothing could be further from the truth, Carbon Dioxide is the gas of life.

What is Carbon Dioxide (CO2)?

Carbon Dioxide is an atmospheric gas comprised of one Carbon and two Oxygen atoms. Carbon Dioxide derives from multiple sources including volcanic outgassing, the combustion of organic matter and respiration processes of living aerobic organisms. It is also produced by various microorganisms from fermentation and cellular respiration. Plants utilize Carbon Dioxide during photosynthesis,using both Carbon and Oxygen to construct carbohydrates. In addition,

plants also release Oxygen into the atmosphere which is subsequently used by heterotrophic organisms.

All animals and mammals that breathe oxygen exhale CO2, all plant life on Earth is reliant on this CO2 to create their own food via photosynthesis and greenhouses enrich their atmospheres with additional CO2 to boost plant growth.

Carbon Fixation is a biochemical process by which atmospheric CO2 is incorporated by plants and turned into energy rich organic molecules such as glucose, thus creating their own food by Photosynthesis which uses CO2 and water to produce sugars from which other organic compounds can be constructed, and oxygen is produced as a by-product which we humans need to live, satellite images from space now show the greening of the Earth from the increase in CO2 levels.

Current levels of CO2

Current readings put the level of atmospheric CO2 at 410 parts per million (ppm). CO2 levels have been steadily rising since the end of the Little Ice Age in the early 1700's where it was around 280ppm. The UN IPCC have stated that the cause of the rise is "likely" due to the Industrial Revolution. This contentious assumption remains unproven.

How much CO2 is in our atmosphere?

The **atmosphere of Earth** is a layer of gases, commonly known as **air**, that surrounds the planet Earth and is retained by Earth's gravity. The atmosphere of Earth protects life on Earth by creating pressure allow ng for liquid water to exist on the Earth's surface, absorbing ultraviolet solar radiation, warming the surface through heat retention (greenhouse effect), and reducing temperature extremes between day and night (the diurnal temperature variation). By volume, dry air contains 78.09% nitrogen, 20.95% oxygen, 0.93% argon, 0.04% carbon dioxide, and small amounts of other gases often referred to as trace gases, among which are the greenhouse gases, principally carbon dioxide, methane, nitrous oxide, and ozone.

Besides argon already mentioned. Air also contains a variable amount of water vapour, on average around 1% at sea level, and 0.4% over the entire atmosphere. Air content and atmospheric pressure vary at different layers, and air suitable for use in photosynthesis by terrestrial plants and breathing of terrestrial animals is found only in Earth's troposphere and in artificial atmospheres.

How much CO2 is man made

The United Nations Intergovernmental Panel on Climate Change (IPCC) agrees human CO2 is only 5 percent man made and natural CO2 is 95 percent of the CO2 inflow into the atmosphere. The ratio of human to natural CO2 in the atmosphere must equal the ratio of the inflows. Yet IPCC claims human CO2 has caused all the rise in atmospheric CO2 above 280 ppm, which is now 130 ppm or 32 percent of today's atmospheric CO2. To cause the human 5 percent to become 32 percent in the atmosphere, the IPCC model treats human and natural CO2 differently, which is impossible because the molecules are identical.

CO2 is blamed for Climate Change and all bad Weather.

Climate is defined as the average state of everyday's weather condition over a period of 30 years. It is measured by assessing the patterns of variation in temperature, humidity, atmospheric pressure, wind, precipitation, atmospheric particle count and other meteorological variables in a given region over long periods of time. Climate differs from weather, in that weather only describes the short-term conditions of these variables in a given region.

Climate change occurs when changes in Earth's climate system result in new weather patterns that last for at least a few decades, and maybe for millions of years. The climate system comprises five interacting parts, the atmosphere (air), hydrosphere (water), cryosphere, biosphere, and lithosphere. The climate system receives nearly all of its energy from the sun, with a relatively tiny amount from earth's interior. The climate system also gives off energy to outer space. The balance of incoming and outgoing energy, and the passage of the energy through the climate system, determines Earth's energy budget. When the incoming energy is greater than the outgoing energy, earth's energy budget is positive and the climate system is warming. If more energy goes out, the energy budget is negative and earth experiences cooling.

Paleoclimatology has built up a comprehensive and extensive history of Earth's ancient climate, **Paleoclimatology** - is the study of changes in climate taken on the scale of the entire history of Earth. It uses a variety of proxy methods from the Earth and life sciences to obtain data previously preserved within rocks, sediments, ice sheets, tree rings, corals, shells, and microfossils. It then uses the records to determine the past states of the Earth's various climate regions and its atmospheric system. Studies of past changes in the environment and biodiversity often reflect on the current situation, specifically the impact of climate on mass extinctions and biotic recovery. **Paleoclimatologists** employ a wide variety of techniques to deduce ancient climates.

Dendroclimatology - Climatic information can be obtained through an understanding of changes in tree growth. Generally, trees respond to changes in climatic variables by speeding up or slowing down growth, which in turn is generally reflected by a greater or lesser thickness in growth rings.

Sedimentary Content - On a longer time scale, geologists must refer to the sedimentary record for data.

Sclerochronology - Coral "rings" are similar to tree rings except that they respond to different things, such as the water temperature, freshwater influx, pH changes, and wave action.

However Paleoclimatology has largely been ignored and left out of the modeling, the IPCC tend to favour their alarmist claims. Dendroclimatology (tree ring data) has been used sparingly.

“Predicting climate temperatures isn't science – it's science fiction.”

Emeritus Professor of Physics at Princeton University Will Happer explains.

Long-term predictive climate models - they don’t work. They haven’t worked in the past. They don’t work now. And it’s hard to imagine when, if ever, they’ll work in the foreseeable future

There’s a common-sense reason for this.

Aside from the human brain, the climate is the most complex thing on the planet. The number of factors that influence climate—the sun, the earth’s orbital properties, oceans, clouds, and, yes, industrial man—is huge and enormously variable.

Let’s just focus our attention on water.

The earth is essentially a water planet. A major aspect of climate involves the complicated interaction between two very turbulent fluids: the atmosphere, which holds large amounts of water (think rain and snow), and the oceans, which cover fully 70% of the earth’s surface.

We can’t predict what effect the atmosphere is going to have on future temperatures because we can’t predict cloud formations.

And the convection of heat, oxygen, salt and other quantities that pass through the oceans, not to mention weather cycles like El Niño in the tropical Pacific, make predicting ocean temperatures an equally difficult business. We can’t predict either side of the atmosphere/ocean equation.

But we can say this with certainty: Water—in all its phases—has huge effects on atmospheric heating and cooling. Compared to water—H20, carbon dioxide—CO2—is a minor contributor to the warming of the earth

It's devilishly difficult to predict what a fluid will do. Trying to figure out what two fluids will do in interaction with each other on a planetary scale over long periods of time is close to impossible.

Anyone who followed the forecast of Hurricane Irma’s path in the late summer of 2017 should understand this. First, the models predicted a direct hit on Miami and the east coast of Florida. Then, defying these predictions, the hurricane suddenly veered to the west coast of Florida. In other words,

even with massive amounts of real-time data, the models still could not accurately predict Irma's path two days in advance.

Does any rational person believe that computer models can precisely predict temperatures decades from now? The answer is they can't, that's why over the last 30 years one climate prediction after another based on computer models, has been wrong.

They're wrong because even the most powerful computer can't solve all the equations needed to accurately describe climate, instead of admitting this, some climate scientists replace the highly complex equations that describe the real world climate with highly simplified ones, their computer models, discarding the unmanageable details, modelers "tune" their simplified equations with lots of adjustable input, numbers that can be changed to produce whatever result the modelers want, so, if they want to show the Earth's temperature at the end of the century will be 2 degrees Celsius higher than it is now, they put in numbers that produce that result - That's not Science that's Science fiction.

Many actual climate scientists are coming out against the pseudoscience of models and predictions, **Dr Roy Spencer** of UAH (University of Alabama at Huntsville) organised a petition against the IPCC Pseudoscientists that attracted **31,487 signatures of actual climate scientists**, each one was verified as genuine before being added to the petition. This past weekend (July 2019) **90 Italian climate scientists** have come out against the IPCC alarmist claims.

The UN IPCC CMIP-6 model has some outlandish predictions, all of which have failed.

In 1994 James Hansen's model predicted the Earth would be warming at 0.35c per decade, however John R Christy and Richard T McNider using 15 years of satellite data and taking out variables like aerosols from volcanoes and the effect from El Nino came out with quite a different result of 0.09c this was extraordinary recently they re-ran the test using the past 25 years of satellite data and came out with 0.095c per century which is astounding. Models versus actual real data. **Modelers have been caught red handed corrupting historical temperature records to make their models work. Pseudoscientist Modelers have been asked to prove their models by turning them around to explain the Medieval warm period, the Roman warm period and the Little Ice Age, simply put, they could not, nor could the models, this is why the models and dire predictions have routinely failed 99% of the time.**

Emeritus Professor of Physics at Princeton University, Will Happer

Recently NASA has come out with a dire warning 'Cold weather to grip the world as Solar Minimum to deepen' NASA says. As solar cycle 24 is ending, we are seeing the first signs of the deepening Eddy Grand Solar Minimum, as our Magnetosphere weakens and allows more galactic cosmic rays to enter our atmosphere, which in turn adversely effect Earth's jet streams, causing the weather to go haywire, last week we saw evidence of its effect as Europe sweltered in the Equatorial vortex as Saharan desert air was thrust over Europe, this week we are seeing

the opposite as unusual summer frosts and even rare snow hit parts of Europe. The Northern hemisphere winter last year was very bad with multiple cold records broken, 2019, 2020, 2021 are forecast to be even worse, this has already caused the worst corn,soy,rice planting ever recorded, with 31 million acres of corn unplanted in the USA.

GLOBAL WARMING MYTH DEBUNKED: HUMANS HAVE MINIMAL IMPACT ON ATMOSPHERE'S CARBON DIOXIDE AND CLIMATE

FEBRUARY 14, 2019
By Jay Lehr, Tom Harris

Global warming activists argue carbon-dioxide emissions are destroying the planet, but the climate impacts of carbon dioxide are minimal, at worst.

Global warming activists argue carbon-dioxide emissions are destroying the planet, but the climate impacts of carbon dioxide are minimal, at worst. Activists would also have you believe fossil-fuel emissions have driven carbon dioxide concentrations to their highest levels in history. The Obama-era Environmental Protection Agency went so far as to classify carbon dioxide as a toxic pollutant, and it established a radical goal of closing all of America's coal-fired power plants.

Claims of unprecedented carbon-dioxide levels ignore most of Earth's 4.6-billion-year history. Relative to Earth's entire record, carbon-dioxide levels are at historically low levels; they only appear high when compared to the dangerously low levels of carbon dioxide that occurred in Earth's very recent history. The geologic record reveals carbon dioxide has almost always been in Earths' atmosphere in much greater concentrations than it is today. For example, 600 million years ago, when history's greatest birth of new animal species occurred, atmospheric carbon-dioxide concentrations exceeded 6,500 parts per million (ppm) — an amount that's 17 times greater than it is today.

Atmospheric carbon dioxide is currently only 410 parts per million. That means only 0.04 percent of our atmosphere is carbon dioxide (compared to 0.03 percent one century ago). Only one molecule in 2,500 is carbon dioxide. Such levels certainly do not pose a health risk, as carbon-dioxide levels in our naval submarines, which stay submerged for months at a time, contain an average carbon-dioxide concentration of 5,000 ppm.

The geologic record is important because it reveals relationships between carbon-dioxide levels, climate, and life on Earth. Over billions of years, the geologic record shows there is no long-term correlation between atmospheric carbon-dioxide levels and Earth's climate. There are periods in Earth's history when carbon dioxide concentrations were many times higher than they are today, yet temperatures were identical to, or even colder than modern times. The claim that fossil-fuel emissions control atmospheric carbon-dioxide concentrations is also invalid, as atmospheric concentrations have gone up and down in the geological record, even without human influence.

The absurdity of climate alarmism claims gets even stranger when you consider there are 7.5 billion people on our planet who, together, exhale 2.7 billion tons of carbon dioxide each year, which is almost 10 percent of total fossil-fuel emissions every year. However, we are but a single species. Combined, people and all domesticated animals contribute 10 billion tons.

Further, 9 percent of carbon-dioxide emissions from all living things arise not from animals, but from anaerobic bacteria and fungi. These organisms metabolize dead plant and animal matter in soil via decay processes that recycle carbon dioxide back into the atmosphere. The grand total produced by all living things is estimated to be 440 billion tons per year, or 13 times the amount of carbon dioxide currently being produced by fossil-fuel emissions. Fossil-fuel emissions are less than 10 percent of biological emissions. Are you laughing yet?

Every apocalyptic pronouncement you hear or read is nothing short of insanity. Their primary goal is not to save plants, humans, or animals, but rather to use climate "dangers" as a justification for centralizing power in the hands of a select few.

By Jay Lehr, Tom Harris

Jay Lehr - Internationally renowned speaker, scientist, and author

Tom Harris - Executive Director of International Climate Science Coalition

New Research: Methane Emissions From Livestock Have No Detectable Effect On The Climate

ccdeditor7 months ago

Agrobiologist and scientific researcher Dr. Albrecht Glatzle, author of over 100 scientific papers and two textbooks, has published research that shows “there is no scientific evidence, whatsoever, that domestic livestock could represent a risk for the Earth’s climate” and the “warming potential of anthropogenic GHG [greenhouse gas] emissions has been exaggerated.”

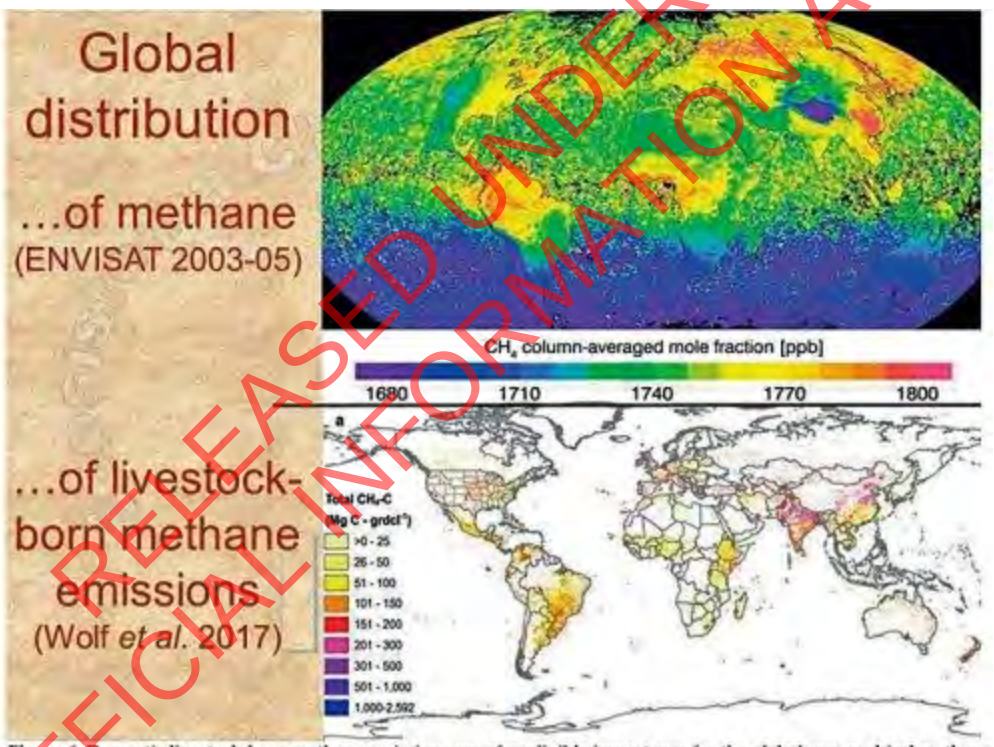


Figure 6. Domestic livestock-born methane emissions are of negligible importance for the global geographical methane distribution [25, 26].

Image as shown in Glatzle, 2018

Image Source: **Glatzle, 2018**

Glatzle, 2018

Domestic Livestock and Its Alleged Role in Climate Change

Abstract:

“**Our key conclusion is that there is no need for anthropogenic emissions of greenhouse gases (GHGs), and even less so for livestock-born emissions, to explain climate change**. Climate has always been changing, and even the present warming is most likely driven by natural factors.

The **warming potential of anthropogenic GHG emissions has been exaggerated**, and the beneficial impacts of manmade CO2 emissions for nature, agriculture, and global food security have been systematically suppressed, ignored, or at least downplayed by the IPCC (Intergovernmental Panel on Climate Change) and other UN (United Nations) agencies.

Furthermore, we expose important methodological deficiencies in IPCC and FAO (Food Agriculture Organization) instructions and applications for the quantification of the manmade part of non-CO2-GHG emissions from agro-ecosystems.

However, so far, these fatal errors inexorably propagated through the scientific literature.

Finally, **we could not find a clear domestic livestock fingerprint neither in the geographical methane distribution nor in the historical evolution of mean atmospheric methane concentration**.”

Key Points:

1. “In order to get the effective man made part of the emissions from managed ecosystems, one has to subtract the baseline emissions of the respective native ecosystems or of the pre-climate-change-managed ecosystems from those of today’s agro-ecosystems (Figure 4). **Omitting this correction leads to a systematic overestimation of farm-born non-CO2 GHG emissions**. Scientific publications generally do not take this consideration into account, as farm-born CH4 and N2O emissions are consistently interpreted at a 100% level as an additional anthropogenic GHG source, just like fossil fuel-born CO2. As the mentioned IPCC guidelines [2007] are taken for the ultimate reference, this **severe methodological deficiency propagated through the scientific literature**.”

2. “Dung patches concentrate the nitrogen ingested from places scattered across the pasture. Nichols et al. [2016] found no significant differences between emission factors from the patches and the rest of the pasture, which means the same amount of nitrous oxide is emitted whether or not the herbage passes livestock’s intestines. However, **the IPCC and FAO do consider mistakenly all nitrous oxide leaking from manure as livestock-born and therefore manmade**.”

3. “**Between 1990 and 2005, the world cattle population rose by more than 100 million head**(according to FAO statistics). **During this time, atmospheric methane concentration stabilized completely**. These empirical observations show that livestock is not a significant player in the global methane budget [Glatzle, 2014]. This appreciation has been corroborated by Schwietzke et al. [2016] who suggested that methane emissions from fossil fuel industry and natural geological seepage have been 60–110% greater than previously thought.”

4. “When looking to the global distribution of average methane concentrations as measured by ENVISAT (Environmental Satellite) [Schneising et al., 2009] and the geographical distribution of domestic animal density, respectively [Steinfeld et al., 2006], **no discernible relationship between both criteria was found** [Glatzle, 2014].”

5. “Although the most recent estimates of yearly livestock-born global methane emissions came out 11% higher than earlier estimates [Wolf et al., 2017], **we still cannot see any discernible livestock fingerprint in the global methane distribution**(Figure 6).”

6. “**The idea of a considerable livestock contribution to the global methane budget relies on theoretical bottom-up calculations**. Even in recent studies, e.g., [Mapfumo et al., 2018], just the emissions per animal are measured and multiplied by the number of animals. Ecosystemic interactions and baselines over time and space are generally ignored [Glatzle, 2014]. Although quite a number of publications, such as the excellent most recent FCRN report (Food Climate Research Network) [2017], do discuss extensively ecosystemic sequestration potentials and natural sources of GHGs, **they do not account for baseline emissions from the respective native ecosystems when assessing man made emissions of non-CO2 GHGs from managed ecosystems**. **This implies a systematic overestimation of the**

warming potential, particularly when assuming considerable climate sensitivity to GHG emissions."

7. "[W]e could not find a domestic livestock fingerprint, neither in the geographical methane distribution nor in the historical evolution of the atmospheric methane concentration. Consequently, in science, politics, and the media, the climate impact of anthropogenic GHG emissions has been systematically overstated. **Livestock-born GHG emissions have mostly been interpreted isolated from their ecosystemic context, ignoring their negligible significance within the global balance**.

There is no scientific evidence, whatsoever, that domestic livestock could represent a risk for the Earth's climate."

8. "[E]ven LA Chefs Column [**Zwick, 2018**], in spite of assuming a major global warming impact of methane, came to the conclusion: 'When methane is put into a broader rather than a reductive context, **we all have to stop blaming cattle ('cows') for climate change**.'"

Even if New Zealand were to cut its CO2 emissions 100 percent it would not make a difference in abating global warming.

China is currently building hundreds of new, coal-fired power plants. To counter China, "India has 589 coal-fired power plants, they are building 446 more, bringing their total to 1,036." These figures are after both governments signed the Paris Climate Agreement, and touted their green credentials.
Naïve-thinking, bordering on western suicide, believes China and India will stop using fossil fuels, led by coal. Sure, India and China will use natural gas, nuclear and oil, but coal is where each economy finds its basic energy resource. Horrible for world emissions, air pollution and global health, but how do westerners, the United Nations, and environmental organizations tell both, growing countries they cannot have access to the same energy opportunities and growth the west has now had for over seventy years?It simply won't happen; world health organizations, research universities, think tanks, and multinational corporations interested in global longevity and clean air should begin working towards clean coal technology.

Continuous power supply going forward for New Zealand and food security, the ability to feed our nation will be paramount as we go into the future.

I urge you to seriously reconsider before pushing through the Zero Carbon bill, I believe it will cause a lot of financial pain for no gain, already England has pushed through the exact same Zero Carbon by 2050 legislation and only now are they working out that it will cost the country one Trillion Pounds.

I also believe that if the government push through this legislation before checking the pseudoscience that it is basing its decision on, which is fundamentally flawed, it would be open to litigation. Pseudoscience or real science that is the question.

Supporting Papers:

https://www.thegwpf.com/putting-climate-change-claims-to-the-test/

http://www.sciencepublishinggroup.com/journal/paperinfo?journalid=298&doi=10.11648/j.ijaos.20190301.13

Document 20

Climate Change Response (Zero Carbon) Amendment Bill

I oppose the Bill becoming law for the following reasons:

A) A new study by researchers at Turku University in Finland found that the human contribution to a rise of 0.1°C in global temperatures over the last century is just 0.01°C.

The paper titled 'No experimental evidence for the significant anthropogenic climate change' was published by Jyrki Kauppinen and Pekka Malmi.

The study found that, "During the last hundred years the temperature is increased about 0.1°C because of carbon dioxide. The human contribution was about 0.01°C."

Kauppinen and Malmi conclude that global temperatures are controlled primarily by cloud cover and that only a small part of the increased carbon dioxide concentration is anthropogenic.

The study also calls into question the claims of the UN IPCC, which concluded that global temperatures are largely driven by human activity.

While the methods and results of the study can be debated, this once again illustrates how there is no overwhelming consensus on man-made global warming as is claimed.

In reality, there are dozens of prominent scientists who believe that climate change is driven by natural forces or that the United Nations' climate projections are unreliable.

B) Japanese researchers at the University of Kobe arrived at similar results as the Turku team, finding in a paper published in early July that cloud coverage may create an "umbrella effect" that could alter temperatures in ways not captured by current modelling.

C) Public policy involving projected massive damage to the New Zealand economy should not be made on the basis of climate models that are problematic. Even the strongest advocates of the accuracy of the models admit they are not accurate e.g. Dr Gavin Schmidt, IPCC reports, etc.

In addition to the recent studies quoted in A) and B) above, highly acclaimed scientists like Judith Curry, Roger Pielke, John Christy and Roy Spencer have produced well-researched papers pointing out the serious divergence between predictions of temperature rise and actual rise, and why they have occurred. The further forward that predictions are attempted, the greater the inaccuracies become.

D) Temperatures have risen by 0.7 to 1.0 degree C in the last 50 – 70 years depending on location, recording methods, timing, start dates etc. There is no evidence that this temperature rise has had detrimental effects on the weather. Why should another degree have "catastrophic" consequences?

Almost all records of weather events since so-called warming began, show positive gains, improvements and fewer catastrophes.

According to a Stanford University study published by the US National Academy of Sciences in its prestigious journal, PNAS, between 1961 and 2010, Iceland's GDP grew by 92 percent in relation to climate change, while Finland's grew by 48 percent and Norway's by 34 percent. Other main beneficiaries have been Canada, Sweden and Russia.

Evidence would suggest that New Zealand's economy will follow a similar pattern. Increases in CO2 have been beneficial to vegetation and crop outputs.

E) If New Zealand, which produces less than 0.2% of the world's so-called man made CO2 emissions, takes drastic action and few other countries do, the detriment will be hugely magnified. We will become even more uncompetitive as exporters in world markets that we are reliant on, more than most other countries.

Since all New Zealand's exports are transported to markets by the burning of fossil fuels, supporting arguments for anthropogenic climate damage will further encourage resistance to the purchase of our products.

F) The work output of the IPCC is largely political rather than scientific. Its very raison d'etre was not to investigate climate changes in an unbiased manner but to prove the existing meme. Funds have been made available to scientists who shout the loudest about problems arising from warming – even bizarre claims totally unrelated to weather or climate, while scientists wanting to offer theories and ideas in opposition have been closed down, under-funded, derided, pushed out of their jobs etc.

G) Multiple emotive claims made over the last 50 years of natural disasters have not come to pass. For a country as small and dependant on international competitiveness as New Zealand, the burden of proof to enact a Bill like this should be a high degree of certainty under scientific methods, applying rigorous scepticism about what is observed, given that cognitive assumptions can distort how observations are interpreted.

The indisputable fact is that proof that this Bill will benefit New Zealand is far from certain.

Roger Turner

Document 21

12 July 2019

Submission re The Zero Carbon Bill

We oppose the Bill becoming law. We oppose it because of the following factors below:

1. Public policy involving projected massive damage to the New Zealand economy should not be made on the basis of climate models that are problematic. Even the strongest advocates of the accuracy of the models admit they are not accurate e.g. Dr Gavin Schmidt, IPCC reports, etc.
2. Highly acclaimed scientists like Judith Curry, Roger Pielke, John Christy and Roy Spencer have produced well-researched papers pointing out the serious divergence between predictions of temperature rise and actual and why they have occurred.
3. Temperatures have risen by 0.7 to 1.0 degree C in the last 50 – 70 years depending on location, recording methods, timing, start dates etc. There is no evidence that this temperature rise has had any detrimental effects on the weather. Why should another degree cause "catastrophic" conditions?
4. Almost all record of weather events since so-called warm ng began, show positive gains, improvements and fewer catastrophes.
5. Increases in CO2 have been highly beneficial to the world's vegetation and crop outputs, helping combat hunger.
6. If New Zealand, which produces less than 0 2% of the world's so-called man made CO2 emissions, takes drastic action and few other countries do, the detriment will be hugely exacerbated. We will become even more uncompetitive as exporters in world markets that we are reliant on more than most other countries.
7. The work output of the IPCC is largely polit cal rather than scientific. Its very reason for existing was not to investigate climate changes in an unbiased manner but to prove the existing meme. Funds have been made available to scientists who shout the loudest about problems arising from warming – even bizarre claims totally unrelated to weather or climate, while scientists wanting to offer theories and ideas in opposition have been closed down, under-funded, derided, squeezed out of their jobs etc.
8. Multiple claims made ove the last 50 years have not been validated. Polar bears extinct, arctic ice disappearing, falling food production, climate refugees in NZ, no more snow, etc.

This Bill will cause significant economic damage to New Zealand with little or no benefit.

NZIER has done some modelling that shows massive negative impacts on our economy. Implementing the Bill could lead to a disastrous $100 billion fall in GDP by 2050, impact ng severely on the poorest people in the economy. It foresees a drop in exports, a 140% increase in trees and huge increases in food and energy prices. Household incomes will be down, unemployment will increase, real wages will fall substantially and much more.

Yours faithfully,

Shane & Teresa Borrell

Document 22

Item of business :

Climate Change Response (Zero Carbon) Amendment Bill

Submission name :

Simon Turner

Comments

I oppose the Bill becoming law.

I do so because:-

A) Public policy involving projected massive damage to the New Zealand economy should not be made on the basis of climate models that are problematic. Even the strongest advocates of the accuracy of the models admit they are not accurate e.g. Dr Gavin Schmidt, IPCC reports, etc

Highly acclaimed scientists like Judith Curry, Roger Pielke, John Christy and Roy Spencer have produced well-researched papers pointing out the s rious divergence between predictions of temperature rise and actual and why they have occurred.

B) Temperatures have risen by 0.7 to 1.0 degree C in the last 50 70 years depending on location, recording methods, timing, start dates etc. There is no evidence that this temperature rise has had any detrimental effects on the weather. Why should another degree cause catastrophic conditions?

C) Almost all record of weather events since so-called warming began, show positive gains, improvements and fewer catastrophes.

D) Increases in CO2 have been highly beneficial to the world s vegetation and crop outputs, helping combat hunger.

E) If New Zealand, which produces less than 0.2% of the world s so-called man made CO2 emissions, takes drastic action and few other countries do, the detriment will be hugely exacerbated. We will become even more uncompetitive as exporters in world markets that we are reliant on more than most other countries.

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G) Multiple claims made over the last 50 years have not been validated. Polar bears extinct, arctic ice disappearing, falling food production, climate refugees in NZ, no more snow, etc.

For a country as small and as dependant on international competitiveness such as New Zealand, the burden of proof to enact the likes of this Bill should be absolute. The indisputable fact is that the proof is far from absolute.

Recommendations

That the Bill NOT become law.

Document 23

Environment Committee

Climate Change Response (Zero Carbon)

Amendment Bill

Submission written by Stephen Eichler PhD. 6 June 2019

I do not wish to appear before a committee.

I am writing as an individual.

Sources of opinion have mostly included media perspectives, other than the scientific basis of this submission which is primarily Dr Roy W Spencer a climatologist.

Main body of submission

The proposed Zero Carbon Act makes two key regulatory proposals which are for CO_2 and methane. CO_2 is to reduce to net zero by 2050 and this aspect will be my key focus.

A key question to ask is, what basis do we have for contemplating actions that will eventually cripple the economy if carried out to the extent suggested. The key crippling effect would be a high price for energy along with insufficient availability or in particular baseload availability if carbon output were so severely limited. There would also be the shutdown or severe reduction of vital industrial processes. Even the long time scale makes a feasible path to this goal unlikely because it offers such an extreme scenario. A feasible path would offer a mechanism whereby the standard of living and lifestyle across New Zealand would not be adversely affected during and after such a transition.

There is a lot more that can be said about the details of such a transition and what technologies are likely to be important or remain important through necessity, however I will move on to the discussion of why we believe there is a problem in nature that our actions determine the outcome of.

Perhaps the key contributor to this is the IPCC hockey stick, which is a graph of average world temperature that demonstrated a low level of temperature variability over long periods of time and then a sudden upsurge which has been deemed due to human activity.

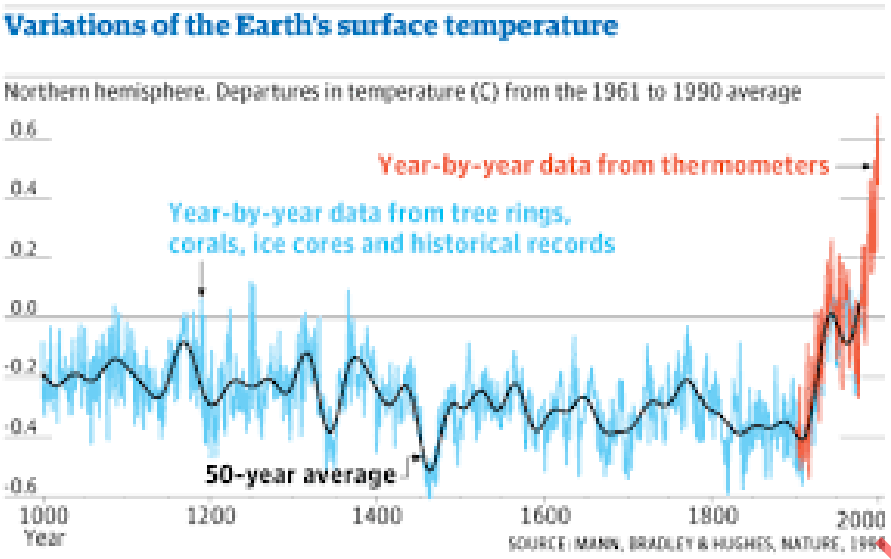


Figure 1. The hockey stick graph from the Journal Nature.

The hockey stick graph (Fig 1) is remarkably devoid of natural variation over time, which makes the hook at the end extremely distinctive. The unfortunate problem with this graphs is that tree rings are an extremely unreliable source of temperature information [1]. Figure 2 shows information for a similar time period which uses historical information to determine temperature in various places e.g. ice skating on the Thames, crop success or failure in Greenland etc. What we see now is the existence of the little ice age and the medieval warm period which are recorded in history. This information shows that there is no hockey stick as world temperature is seen to vary naturally over time, making it much more difficult to attribute significance to the current small increases in average world temperature.

Now you may be starting to wonder if climate crippling measures are justified to endeavour to regulate something that may be varying only naturally rather than due to human activity. So let us consider the role of CO_2 in the atmosphere and the role of water vapour which is by far a more significant greenhouse gas [1].

The CO_2 concentration has been increasing in the atmosphere (Fig 3). However there are still outstanding questions as to whether some of this variation is naturally occurring. These questions are compounded by the large amount of CO_2 absorption of CO_2 by the earth ecosystems that has been inferred by the scale of industry output [1].

CO_2 is actually a trace gas in the atmosphere at 0.04% and as such it cannot be used to directly explain global warming. Its effect rather has to be to in some way to upset the balance between water vapour in the atmosphere (which is a powerful greenhouse agent) and liquid water (which has little direct effect on the retention or loss of heat by the atmosphere) [2].

The IPCC models this and uses positive feedback for the effect of CO_2 on water vapour balance and the subsequent retention of more heat on average, resulting in a severely pronounced effect of CO_2. There is however mounting evidence that the IPCC has so far ignored, that the feedback is actually negative feedback, which would mean that the actual effect of this trace gas CO_2 on global

temperature and other weather phenomena affected by this, is insignificant [2]. We expect the weather models to improve over time and to more accurately reflect factors of this nature.

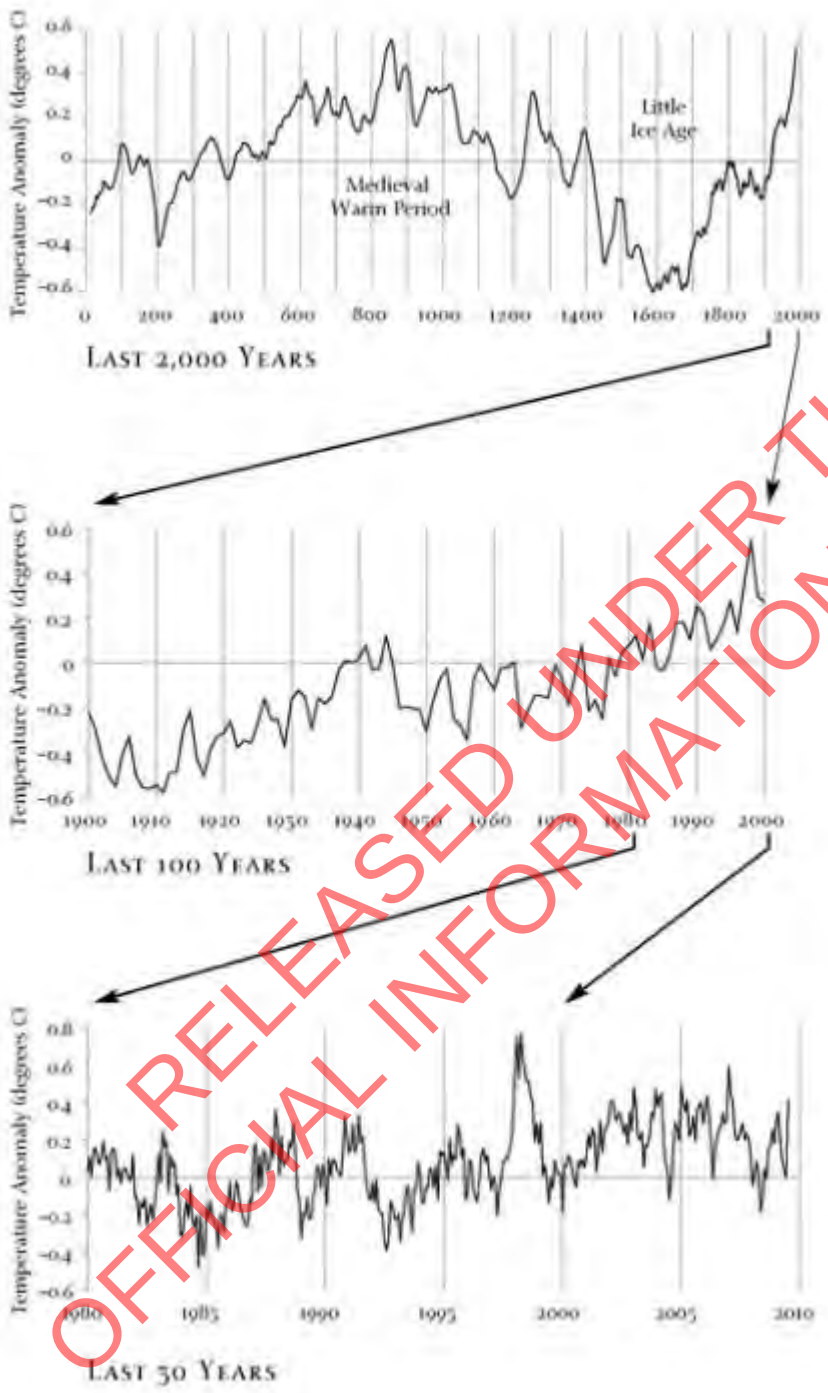
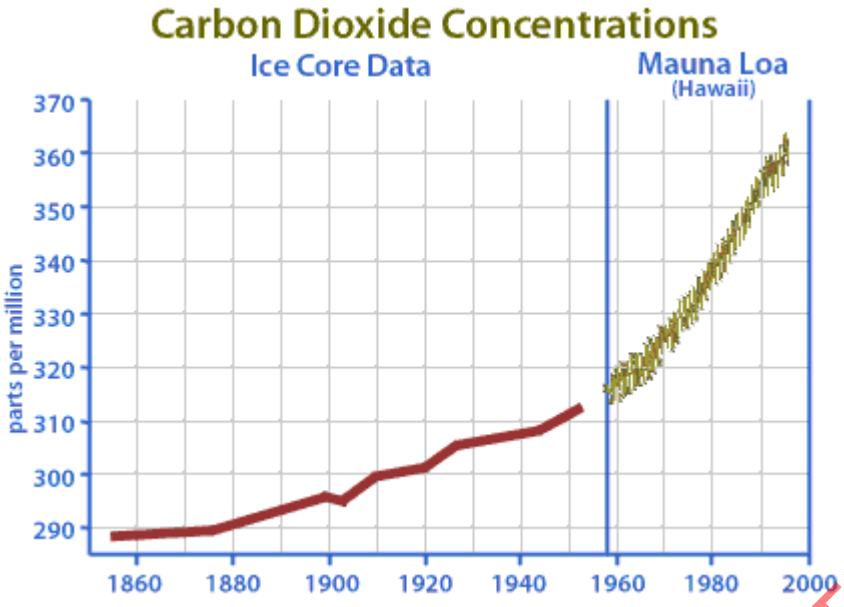


Figure 2. The global temperature changes obtained from historical information [1].



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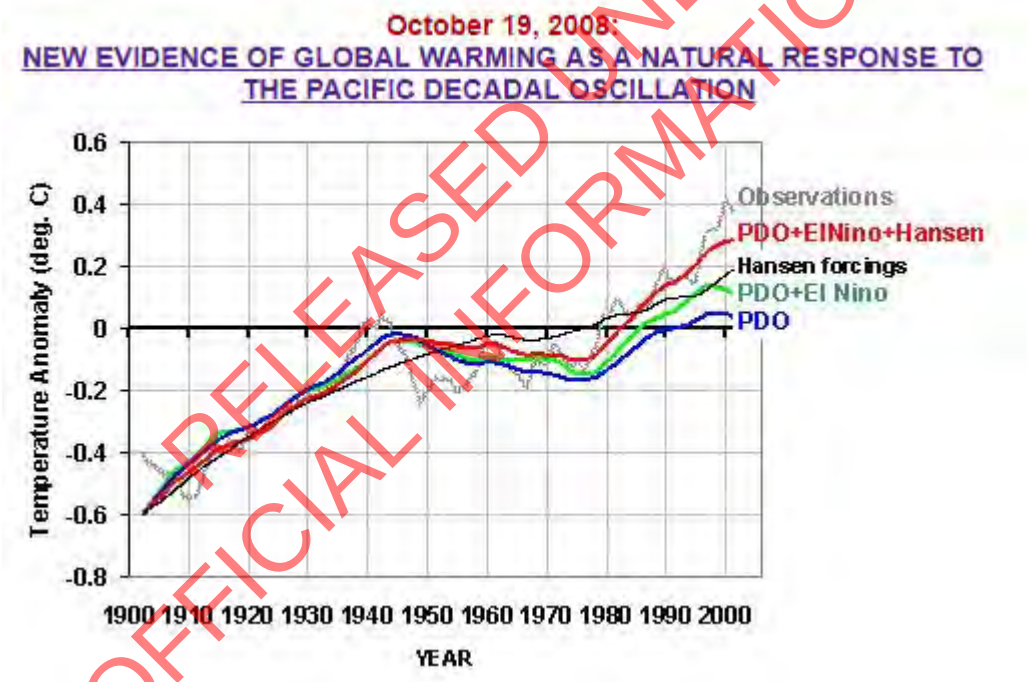

Figure 4, The Pacific Decadal Oscillation

Here I introduce the Pacific Decadal Oscillation (Fig 4), which is an environmental cycle that occurs over 20 to 40 years that behaves in similar ways to El Nino and La Nina. Now I quote the author of [2].

"Now, one would think that the IPCC reached its conclusion that mankind very likely caused the recent warming after ruling out natural climate variability, like that associated with the PDO, as a

cause. But the truth is that they never seriously investigated it. The IPCC has taken for granted that there are no natural variations in global average temperatures once one gets beyond a time scale of ten years or so."

"Specifically, the IPCC's most important (and incorrect) assumption is that the average cloud cover of the Earth always remains the same. It is well known that the primary role of clouds is to cool the Earth, and so any long-term change in clouds is a potential source of global warming or cooling. The 2007 IPCC report does indeed mention the Pacific Decadal Oscillation and other types of multi-decadal variability, but for some reason never asks the obvious question: Could these natural climate fluctuations cause a change in global cloudiness?"

Figure 4 show that the Pacific Decadal Oscillation pattern coincides with the pattern of average global temperatures over the last one hundred years suggesting that these recent changes in temperature may be natural in origin and might also be expected as a result of the end of the Little Ice Age.

You might now be wondering how well justified drastic changes to the economy might be as a result of a belief that we can alter something that was caused mostly naturally rather than by the effect of human activity. If this were the case then modifying our output of CO_2 in an at empt to regulate nature may be ineffective.

Because of the severe uncertainties and incorrect cien ific foundations in the basis of the argument establishing this climate action, I believe that it is unjustified to implement extreme measures as a response, that would severely damage the economy. Rather I think that it is justified to take smaller steps towards feasible use of renewable energy that avoid significantly damaging the standard of living and lifestyle of New Zealanders. This would allow time for the climate models to be improved to the extent that better decisions toward the future of New Zealand can be made.

References,

[1] Spencer, Roy W. The Great Global Warming Blunder: How Mother Nature Fooled the World's Top Climate Scientists . (2012) Encounter Books. Kindle Edition.

[2] Global Warming and Nature's Thermostat by Roy W. Spencer, Ph.D. (2010) http://weatherstreet.com/weatherquestions/Roy-Spencer-on-global-warming.htm

Document 24

Environment Committee

Climate Change Response (Zero Carbon)

Amendment Bill

Submission written by Stephen Eichler PhD. 14 July 2019

(This upload replaces the previous two uploads that I have made.)

I do not wish to appear before a committee.

I am writing as an individual.

Sources of opinion have mostly included media perspectives, other than th pure scientific basis of this submission which is primarily Dr Roy W Spencer (USA) Dr Craig D. Idso (USA), Yusuke Ueno , J. Kauppinen and P. Malmi who are climatologists.

Main body of submission

The proposed Zero Carbon Act makes two key regulatory proposals which are for CO_2 and methane. CO_2 is to reduce to net zero by 2050 and this aspect will be my key focus.

A key question to ask is, what basis do we have for contemplating actions that will eventually cripple the economy if carr ed out to the extent suggested. The key crippling effect would be a high price for energy along with insufficient availability or in particular baseload availability if carbon output were so severely limited. There would also be the shutdown or severe reduction of vital industrial processes. Even the ong time scale makes a feasible path to this goal unlikely because it offers such an extreme scenario A feasible path would offer a mechanism whereby the standard of living and lifestyle across New Zealand would not be adversely affected during and after such a transition.

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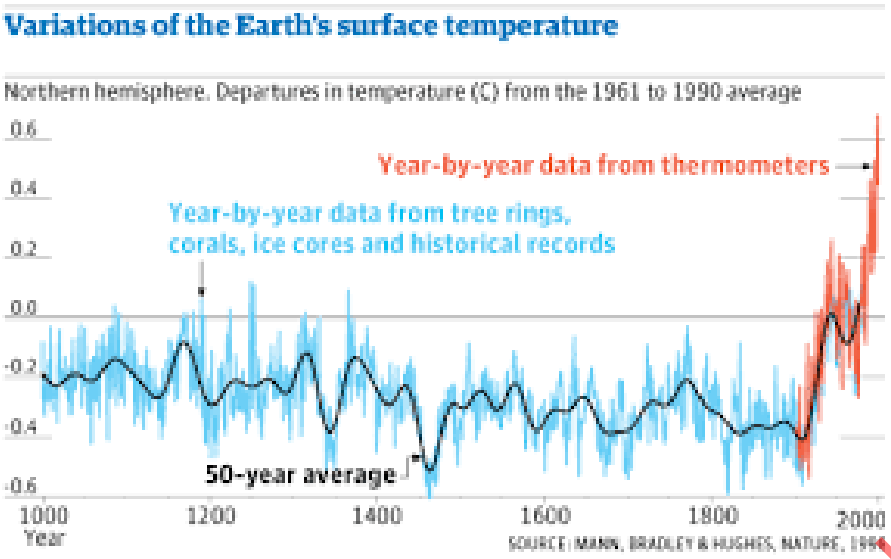

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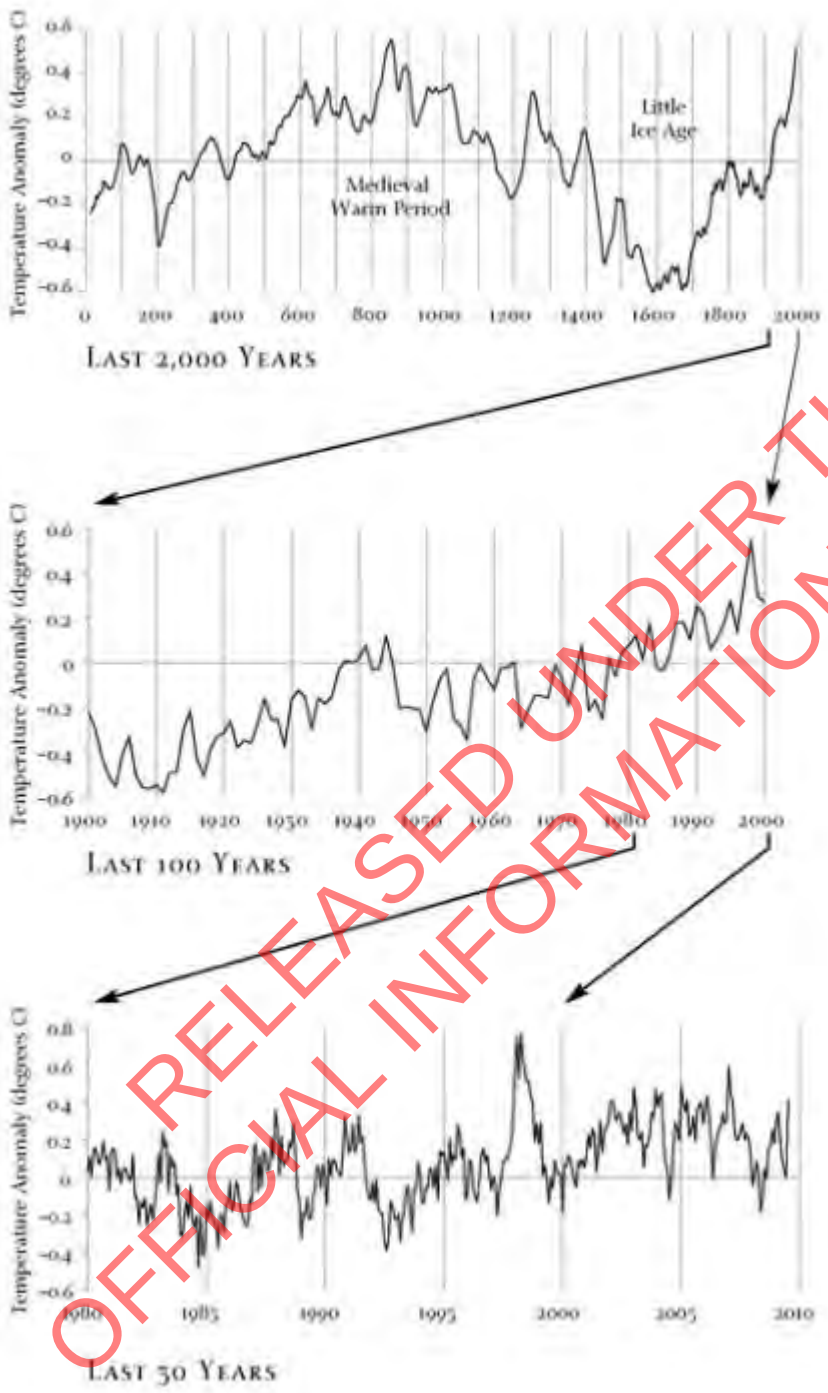

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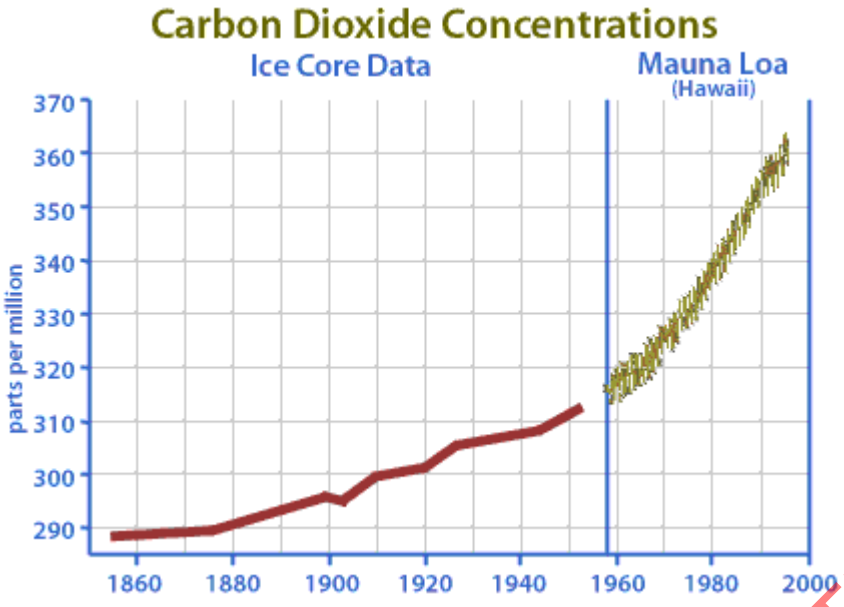

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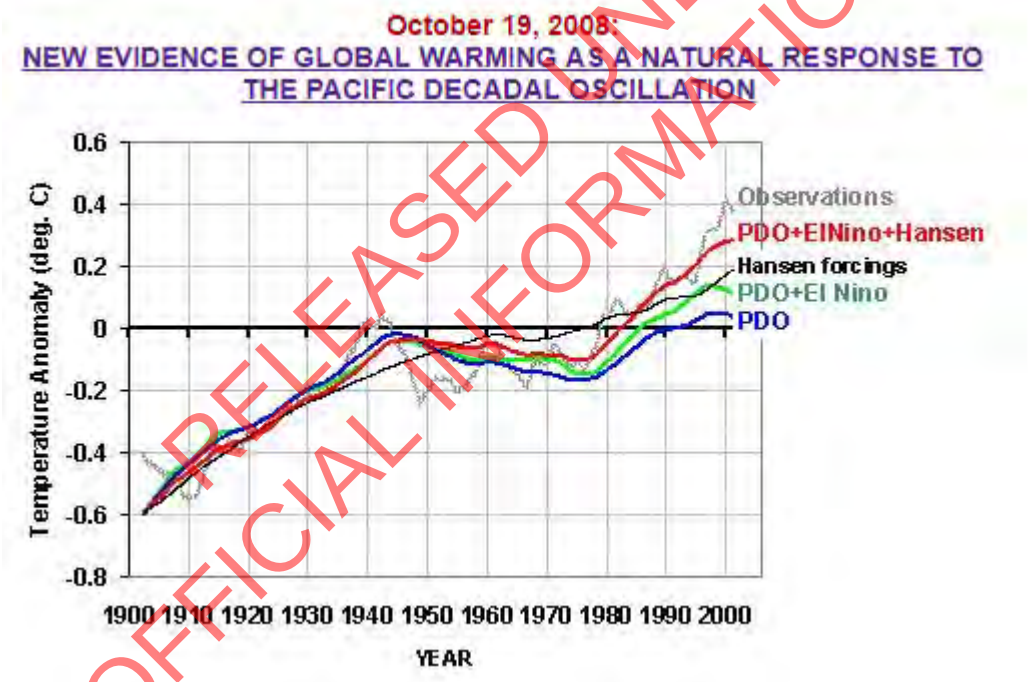

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"Specifically, the IPCC's most important (and incorrect) assumption is that the average cloud cover of the Earth always remains the same. It is well known that the primary role of clouds is to cool the Earth, and so any long-term change in clouds is a potential source of global warming or cooling. The 2007 IPCC report does indeed mention the Pacific Decadal Oscillation and other types of multi-decadal variability, but for some reason never asks the obvious question: Could these natural climate fluctuations cause a change in global cloudiness?"

Figure 4 show that the Pacific Decadal Oscillation pattern coincides with the pattern of average global temperatures over the last one hundred years suggesting that these recent changes in temperature may be natural in origin and might also be expected as a result of the end of the Little Ice Age.

Effect of carbon dioxide

The key unanswered question from the body of the submission is as to what evidence there is for increasing carbon dioxide content of the atmosphere to cause the small increases in temperature that we have seen, coming out of the Little Ice Age. The reference to small increases in temperature relies on knowledge about past naturally caused temperature fluctuations, which will be discussed here, see Fig 5.

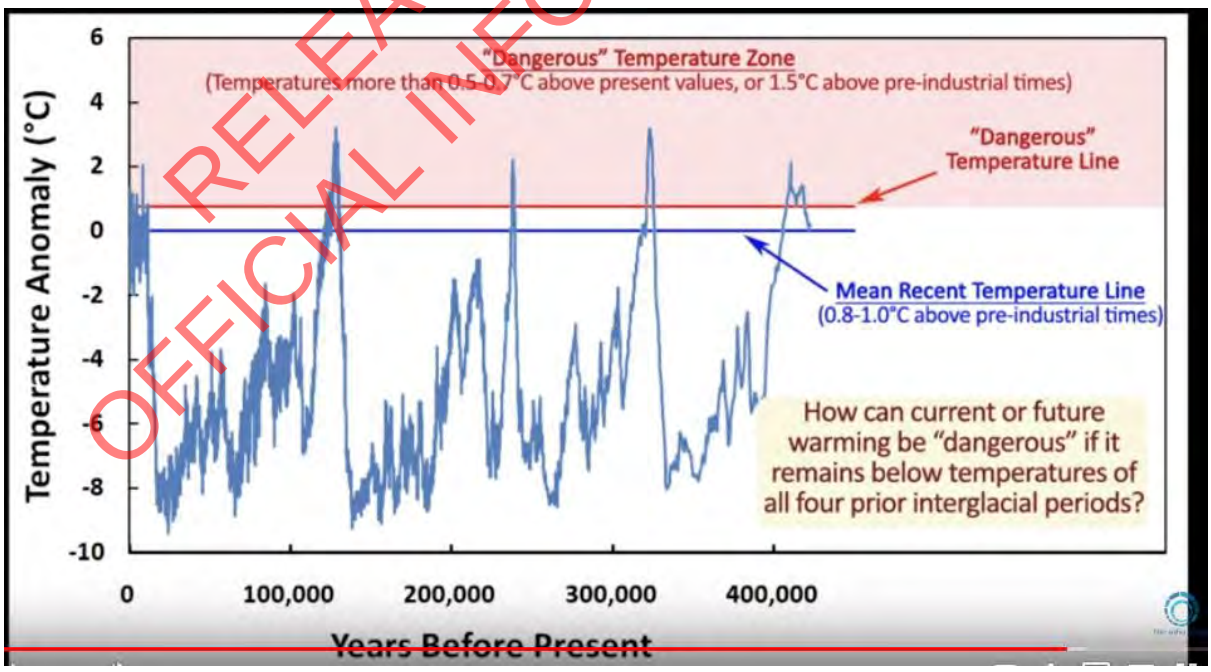

Figure 5. From [3].

The following is quoted from [4]

“2.1.1 Correlation with Temperature

According to the IPCC, the global warming of the mid- to late twentieth century and early twenty-first century was caused primarily by the rise in atmospheric CO_2 concentration. This assertion is controversial (see Smagorinsky *et al*. (1982) and Idso (1982) for early pro/con positions on the issue), and with the retrieval and preliminary analysis of the first long ice core from Vostok, Antarctica—which provided a 150,000-year history of both surface air temperature and atmospheric CO_2 concentration—the debate became even more intense. The close associations of the ups and downs, *Fig 6*, of atmospheric CO_2 and temperature evident during glacial terminations and inceptions in that record, as well as in subsequent records of even greater length, led many supporters of the CO_2-induced global warming theory to assert those observations proved anthropogenic CO_2 emissions were responsible for twentieth century global warming. This contention was challenged by Idso (1989) who wrote, “changes in atmospheric CO_2 content never precede changes in air temperature, when going from glacial to interglacial conditions, *Fig 7*; and when going from interglacial to glacial conditions, the change in CO_2 concentration actually lags the change in air temperature (Genthon *et al*., 1987).” He thus concludes, “changes in CO_2 concentration cannot be claimed to be the cause of changes in air temperature, for the appropriate sequence of events (temperature change following CO_2 change) is not only never present, it is actually violated in [at least] half of the record (Idso, 1988).”
“

Figure 7 requires some explanation as the axes for temperature and carbon dioxide concentration have been adjusted to superimpose. There is in reality an 800 year lead of temperature, meaning that carbon dioxide concentration rise was not the cause of the temperature rise.

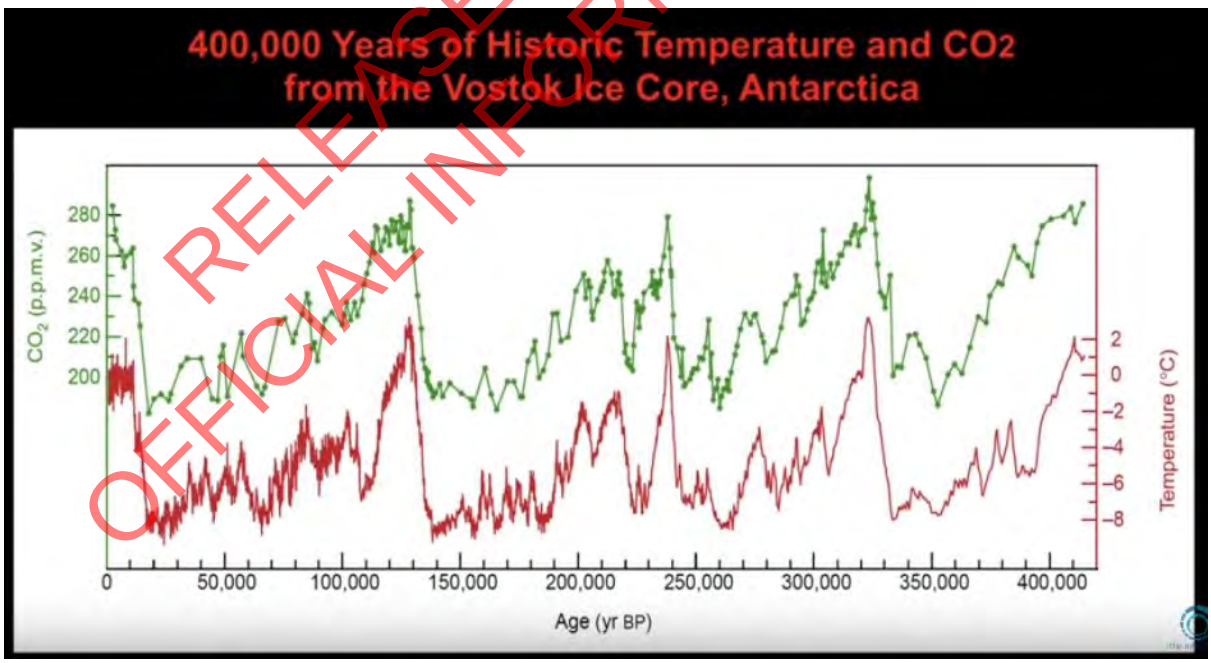

Figure 6. From [3].

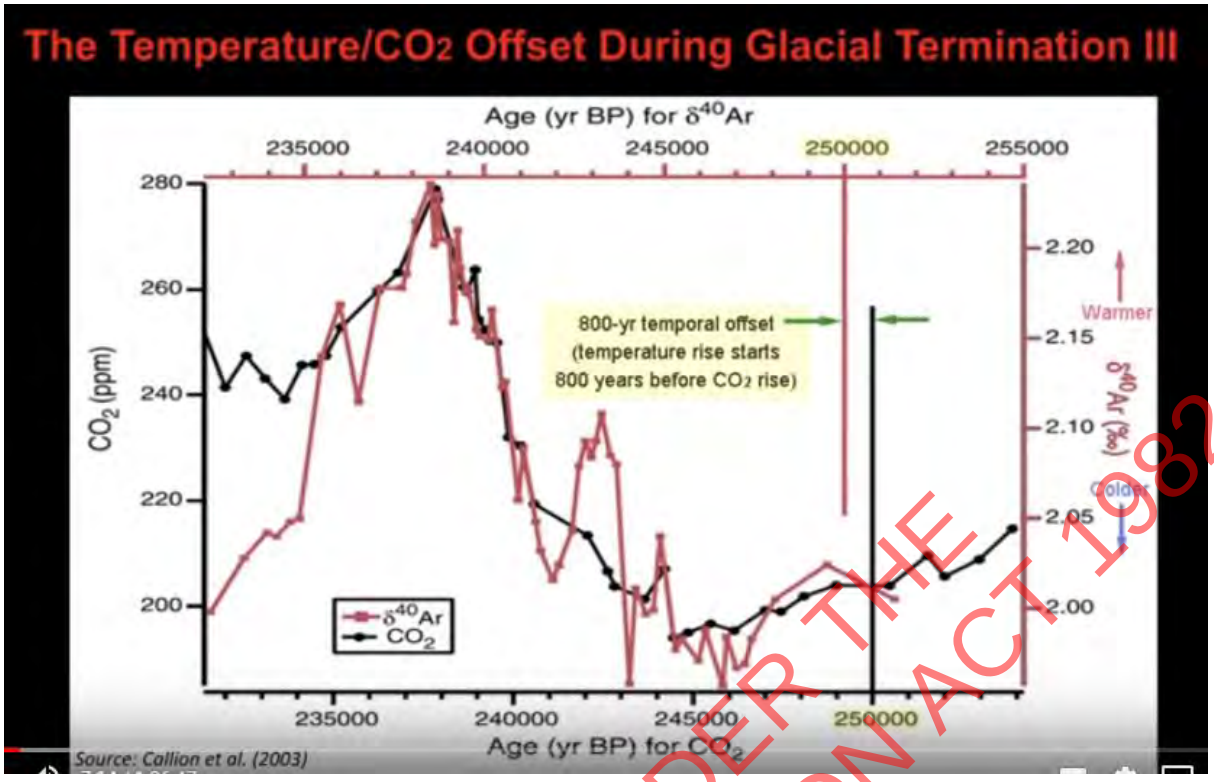

Figure 7. From [3].

Figure 8 shows a further decoupled relationship between carbon dioxide concentration and temperature over the last 10 thousand years.

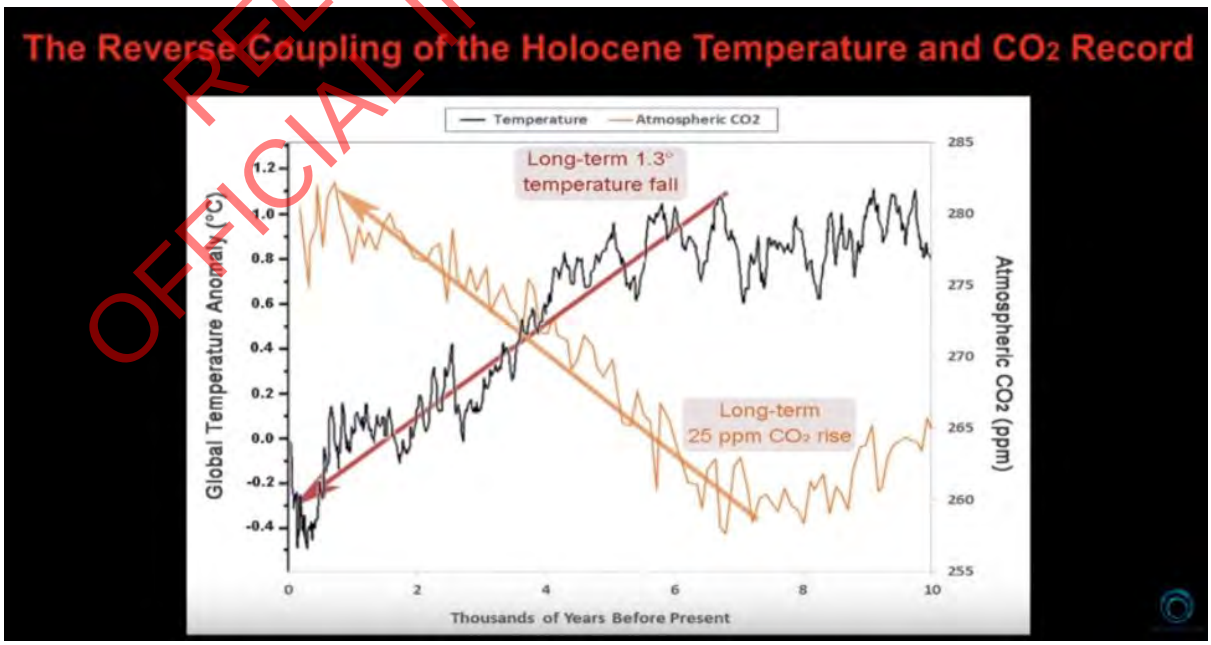

Figure 8. From [3].

Figure 9 details failure of causation of temperature change by carbon dioxide concentration changes.

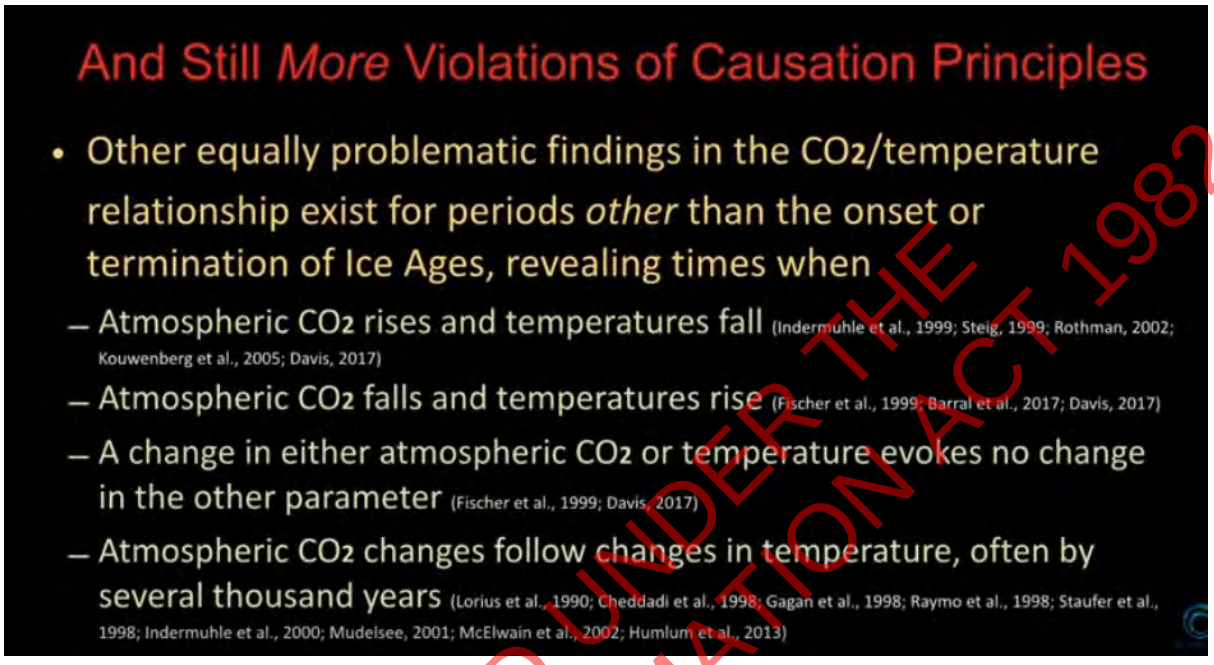

Figure 9. From [3].

An example of correlation failure along with causation over time from 1945-1975 is seen in Fig 10. The modest rate of warming paused while carbon dioxide concentration increased by 20ppm. Also the same rate of temperature increase was seen for a five times greater amount of carbon dioxide.

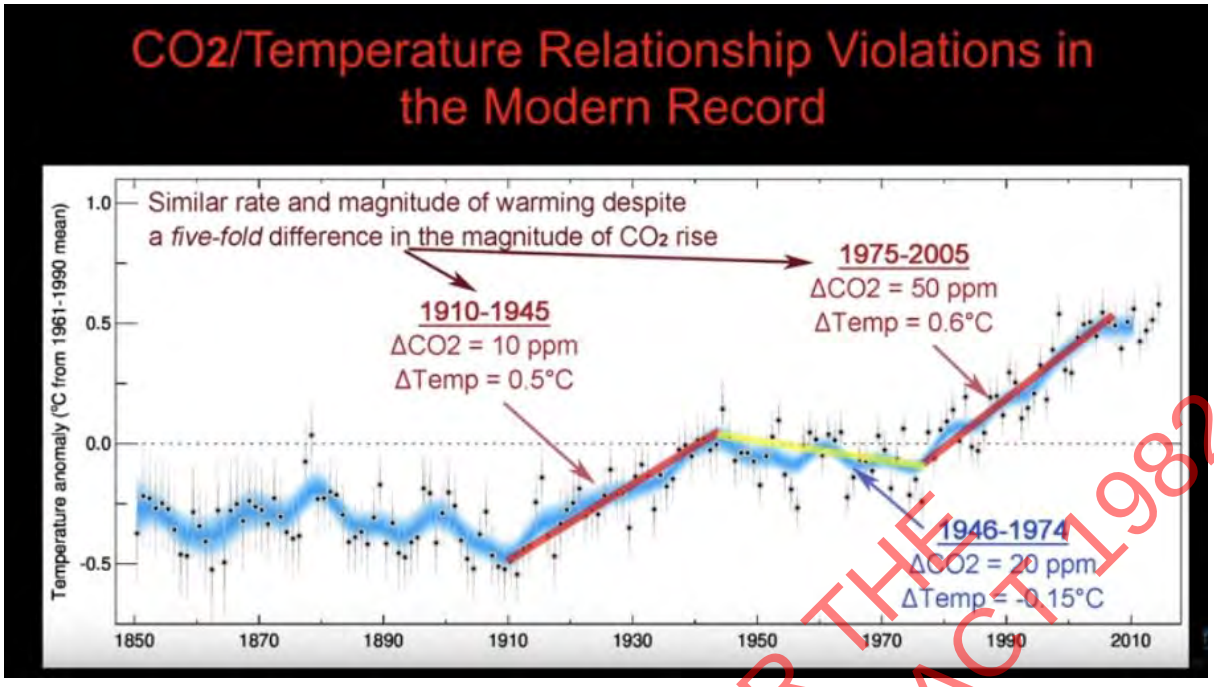

Figure 10. From [3].

Figure 11 shows sea ice coverage for the last 10 thousand years. We see there is a lot of natural variation in the amount of sea ice cover, which changes the perspective on the partial reduction of sea ice that has been observed in the Arctic. There are even historical records of naturally caused warmer times, when Greenland had colonies of farmers. We are not seeing anything new here.

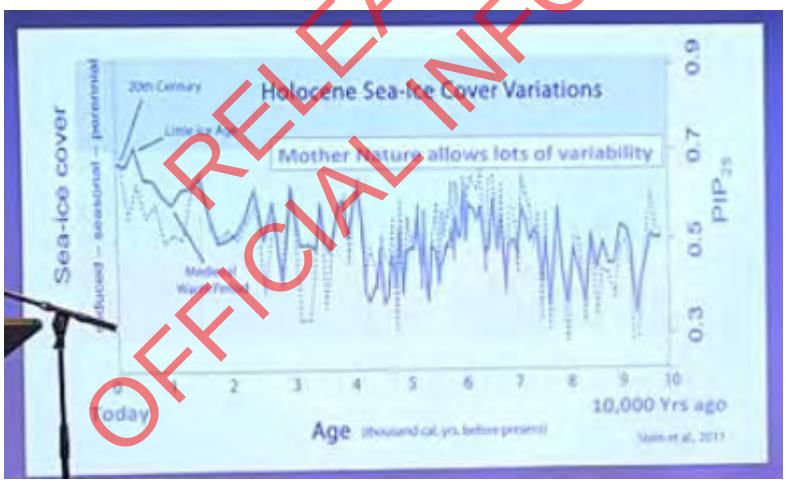

Figure 11. From [3].

There is also evidence to the contrary of that provided by the UN that there has been a reduction in the global burned area over the last century, see Fig 12.

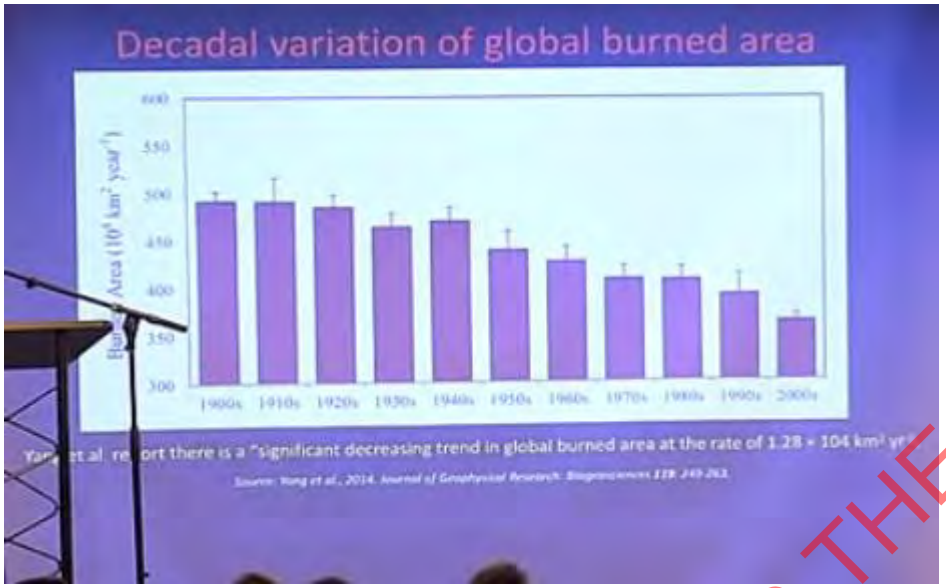

Figure 12. From [3].

Japanese and Finish studies corroborate each other.

Two new papers from Japan and Finland [8][9] agree that cloud cover and factors controlling it explain the recent temperature changes that we see. They find that the IPCC has left out the umbrella effect due to clouds from their models. They also find that humidity and cloudiness explain observed temperature changes in a way the carbon dioxide fails to do, see Fig 13 (from the Finnish study). The cloud cover is inversely related to temperature. Figure 14 (from the Finnish study) shows the actual and predicted temperature changes along with the temperature change due to carbon dioxide, which is very small. They then conclude that anthropogenically caused climate change on the basis of carbon dioxide effects is virtually non-existent.

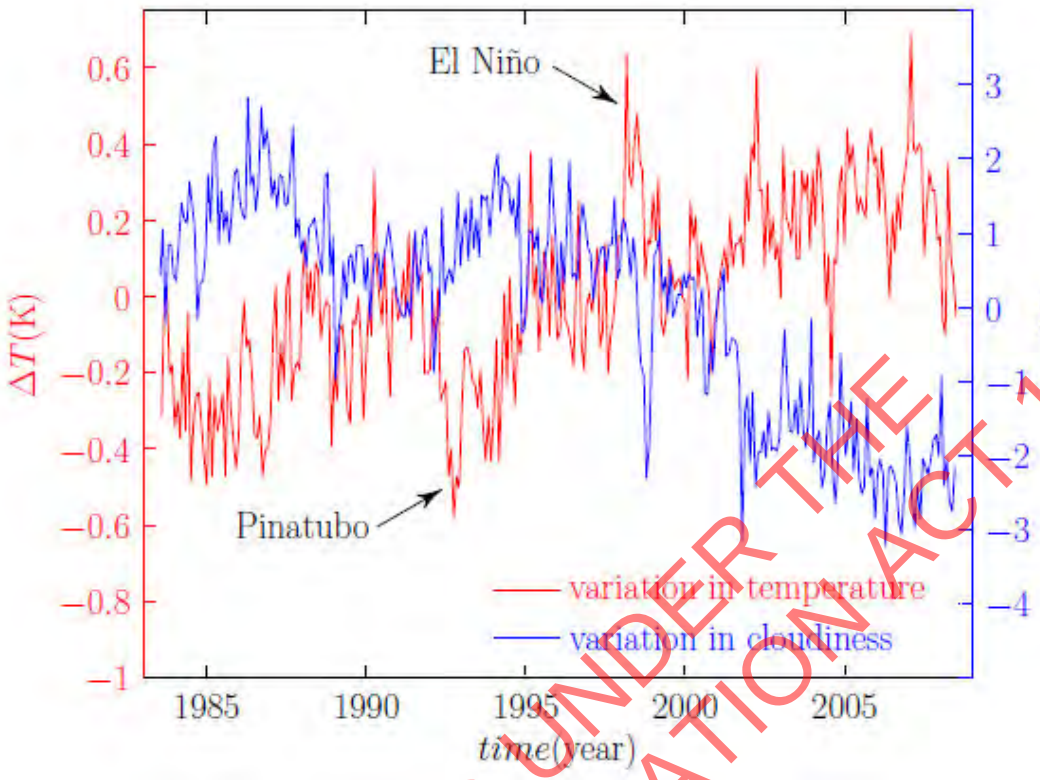

Figure 13. Global temperature anomaly (red) and the global low cloud cover changes (blue) according to the observations. The anomalies a e between summer 1983 and summer 2008. The time resolution of the data is one month, but the seasonal signal is removed. Zero corresponds to about 15°C for the temperature and 26 % for the low cloud cover.

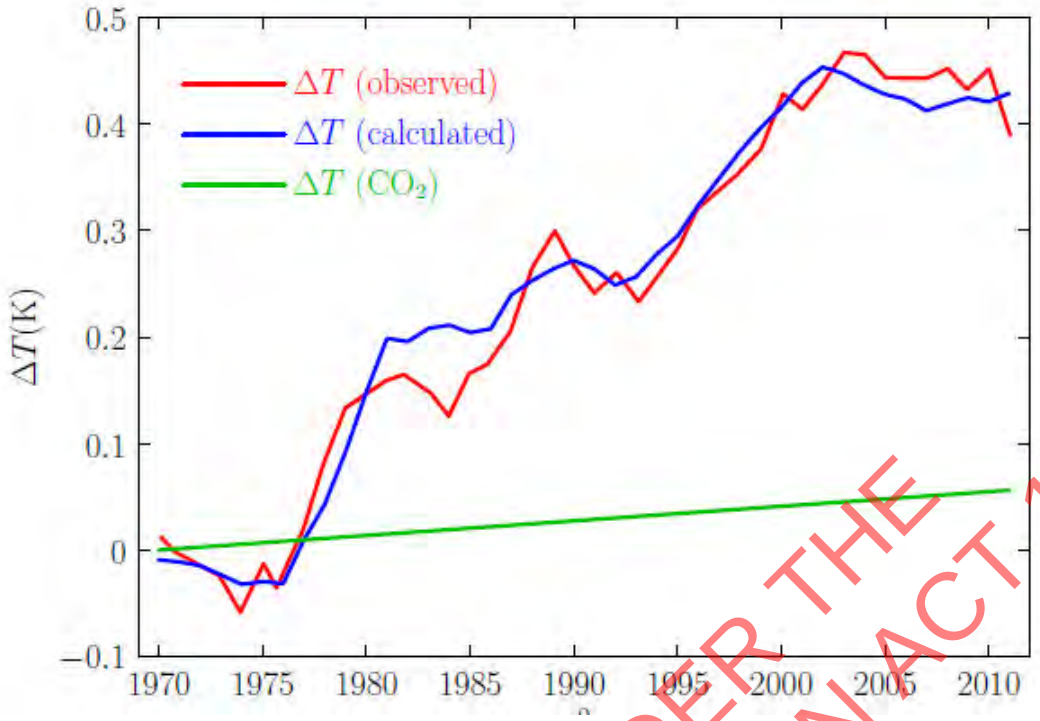

Figure 14. Observed global mean temperature anomaly (red), calculated anomaly (blue), which is the sum of the natural and carbon dioxide contributions. The green line is the CO2 contribution merely. The natural component is derived using the observed changes in the relative humidity. The time resolution is one year.

Italian Scientists have their say

Ninety Italian scientists have signed a petition: CO_2 Impact On Climate "UNJUSTIFIABLY EXAGGERATED" ... Catastrophic Predictions "NOT REALISTIC". See [5] or [6].

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This is the thesis of anthropogenic global warming [Anthropogenic Global Warming] promoted by the Intergovernmental Panel on Climate Change (IPCC) of the United Nations, whose consequences would be environmental changes so serious as to fear enormous damage in an imminent future, unless drastic and costly mitigation measures are immediately adopted.

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These quoted and studied works of others help to substantiate the proposi ion that increasing carbon dioxide concentration in the atmosphere does not result in Anthropogenic Global Warming though some natural variation in temperature (and other climatic parameters) is seen as might be expected based on studies of natural climatic variation in the past. Factors likely to be affecting global average temperature include Sun cycles, earth orbit dynamics, pacific decadal oscillation, El Nino and proximity in time of an ice age or warm period. The tenuous link proposed by the IPCC between carbon dioxide concentration and stronger greenhouse effectors such as water vapour balance is not substantiated as a control mechanism by the scientific information presented here. Indeed that thesis is strongly contradicted.

The level of carbon dioxide in the atmosphere of about 400ppm really is only a trace amount (even though it is a greenhouse gas), however there is evidence emerging that increases in this vital nutrient for plants are having a beneficial effect [7]. This is especially true in hot dry areas where plants are forced to conserve water and in so doing, limit their own access to carbon dioxide. The higher levels we now see make uptake of carbon dioxide more efficient, while conserving water.

The belief that we control the weather as taught to us by the IPCC is gradually coming into focus as unsubstantiated and lacking scientific integrity. What this means is that we are not under immediate pressure to end our reliance on fossil fuels though they will eventually run out. By then, we will have had time to transition gracefully to other forms of baseload capable energy generation. Baseload capability will still be required for household electricity in the future though processes such as making hydrogen from electricity could occur at times of specific generation surplus. Nevertheless wind and solar sources lack sufficient intensity to provide the industrial quantities of energy that are required, though their contribution is welcome. Consideration needs to be given to evolving nuclear technologies for generation of electricity as the standards of safety and waste management improve and mature. The Greens in Scandinavia may be the first of this group to have realised that this is an

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You might now be wondering how well justified drastic changes to the economy might be as a result of a belief that we can alter something that was caused mostly naturally rather than by the effect of human activity. If this were the case then modifying our output of CO_2 in an attempt to regulate nature may be ineffective.

Because of the severe uncertainties and incorrect scientific foundations in the basis of the argument establishing this climate action, I believe that it is unjustified to implement extreme measures as a response, that would severely damage the economy. Rather I think that it is justified to take smaller steps towards feasible use of renewable energy that avoid significantly damaging the standard of living and lifestyle of New Zealanders. This would allow time for the climate models to be improved to the extent that better decisions toward the future of New Zealand can be made.

It is recommended that the Zero Carbon Amendment should not be passed.

References,

[1] Spencer, Roy W. The Great Global Warming Blunder: How Mother Nature Fooled the World's Top Climate Scientists . (2012) Encounter Books. Kindle Edition

[2] Global Warming and Nature's Thermostat by Roy W. Spencer, Ph.D. (2010) http://weatherstreet.com/weatherquestions/Roy-Spencer-on-global-warming.htm

[3] https://www.thesohoforum.org/past-events April 15 2019 Debate between Craig Idso and Jeff Bennett. Topic: "There is little or no rigorous evidence that rising concentrations of carbon dioxide are causing dangerous global warming and threatening life on the planet." Craig Idso of the Center for the Study of Carbon Dioxide and Global Change vs. Jeff Bennett who is an astrophysicist and educator.

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[6] http://www.opinione.it/cultura/2019/06/19/redazione_riscaldamento-globale-antropico-clima-inquinamento-uberto-crescenti-antonino-zichichi/?altTemplate=Stampa&fbclid=IwAR1YAoqulAKKXJTY-uzRfSEaX-G6NRpVOckp3nVE7iiTAgOQu8DMHGUxRnE

[7] Idso, C.D, Idso, S.B., Carter, R.M., and Singer, S.F. (Eds.) 2014. Climate Change Reconsidered II: Biological Impacts. Chicago, IL: The Heartland Institute.

[8] Yusuke Ueno, Masayuki Hyodo, Tianshui Yang, Shigehiro Katoh. Intensified East Asian winter monsoon during the last geomagnetic reversal transition. Scientific Reports, 2019; 9 (1) DOI: 10.1038/s41598-019-45466-8

See also Appendix 1 and this website:

Kobe University. "Winter monsoons became stronger during geomagnetic reversal: Revealing the impact of cosmic rays on the Earth's climate." ScienceDaily. ScienceDaily, 3 July 2019. <www.sciencedaily.com/releases/2019/07/190703121407.htm>.

[9] NO EXPERIMENTAL EVIDENCE FOR THE SIGNIFICANT ANTHROPOGENIC CLIMATE CHANGE, J. KAUPPINEN AND P. MALMI, arXiv:1907.00165v1 [physics.gen-ph] 29 Jun 2019.

Appendix 1

Winter monsoons became stronger during geomagnetic reversal

Revealing the impact of cosmic rays on the Earth's climate

Date:

July 3, 2019

Source:

Kobe University

Summary:

New evidence suggests that high-energy particles from space known as galactic cosmic rays affect the Earth's climate by increasing cloud cover, causing an 'umbrella effect'.

New evidence suggests that high-energy particles from space known as galactic cosmic rays affect the Earth's climate by increasing cloud cover, causing an "umbrella effect."

When galactic cosmic rays increased during the Earth's last geomagnetic reversal transition 780,000 years ago, the umbrella effect of low-cloud cover led to high atmospheric pressure in Siberia, causing the East Asian winter monsoon to become stronger. This is evidence that galactic cosmic rays influence changes in the Earth's climate. The findings were made by a research team led by Professor Masayuki Hyodo (Research Center for Inland Seas, Kobe University) and published on June 28 in the online edition of *Scientific Reports*.

The Svensmark Effect is a hypothesis that galactic cosmic rays induce low cloud formation and influence the Earth's climate. Tests based on recent meteorological observation data only show minute changes in the amounts of galactic cosmic rays and cloud cover, making it hard to prove this theory. However, during the last geomagnetic reversal transition, when the amount of galactic cosmic rays increased dramatically, there was also a large increase in cloud cover, so it should be possible to detect the impact of cosmic rays on climate at a higher sensitivity.

In the Chinese Loess Plateau, just south of the Gobi Desert near the border of Mongolia, dust has been transported for 2.6 million years to form loess layers -- sediment created by the accumulation of wind-blown silt -- that can reach up to 200 meters in thickness. If the wind gets stronger, the coarse particles are carried further, and larger amounts are transported. Focusing on this phenomenon, the research team proposed that winter monsoons became stronger under the umbrella effect of increased cloud cover during the geomagnetic reversal. They investigated changes in particle size and accumulation speed of loess layer dust in two Loess Plateau locations.

In both locations, for about 5000 years during the geomagnetic reversal 780,000 years ago, they discovered evidence of stronger winter monsoons: particles became coarser, and accumulation speeds were up to > 3 times faster. These strong winter monsoons coincide with the period during the geomagnetic reversal when the Earth's magnetic strength fell to less than ¼, and galactic cosmic rays increased by over 50%. This suggests that the increase in cosmic rays was accompanied by an increase in low-cloud cover, the umbrella effect of the clouds cooled the continent, and Siberian high atmospheric pressure became stronger. Added to other phenomena during the geomagnetic reversal -- evidence of an annual average temperature drop of 2-3 degrees Celsius, and an increase in annual temperature ranges from the sediment in Osaka Bay -- this new discovery about winter monsoons provides further proof that the climate changes are caused by the cloud umbrella effect.

"The Intergovernmental Panel on Climate Change (IPCC) has discussed the impact of cloud cover on climate in their evaluations, but this phenomenon has never been considered in climate predictions due to the insufficient physical understanding of it," comments Professor Hyodo. "This study provides an opportunity to rethink the impact of clouds on climate. When galactic cosmic rays increase, so do low clouds, and when cosmic rays decrease clouds do as well, so climate warming may be caused by an opposite-umbrella effect. The umbrella effect caused by galactic cosmic rays is important when thinking about current global warming as well as the warm period of the medieval era."

Story Source:

Materials provided by **Kobe University**. *Note: Content may be edited for style and length.*

Document 25

Environment Committee

Climate Change Response (Zero Carbon)

Amendment Bill

Submission written by Stephen Eichler PhD. 9 July 2019

I do not wish to appear before a committee.

I am writing as an individual.

Sources of opinion have mostly included media perspectives, other than the pure scientific basis of this submission which is primarily Dr Roy W Spencer (USA) and Dr Craig D. Idso (USA) who are climatologists.

Main body of submission

The proposed Zero Carbon Act makes two key regulatory proposals which are for CO_2 and methane. CO_2 is to reduce to net zero by 2050 and this aspect will be my key focus.

A key question to ask is, what basis do we have for contemplating actions that will eventually cripple the economy if carried out to the extent suggested. The key crippling effect would be a high price for energy along with insufficient availability or in particular baseload availability if carbon output were so severely limited. There would also be the shutdown or severe reduction of vital industrial processes. Even the long time scale makes a feasible path to this goal unlikely because it offers such an extreme scenario. A feasible path would offer a mechanism whereby the standard of living and lifestyle across New Zealand would not be adversely affected during and after such a transition.

There is a lot more that can be said about the details of such a transition and what technologies are likely to be important or remain important through necessity, however I will move on to the discussion of why we believe there is a problem in nature that our actions determine the outcome of.

Perhaps the key contributor to this is the IPCC hockey stick, which is a graph of average world temperature that demonstrated a low level of temperature variability over long periods of time and then a sudden upsurge which has been deemed due to human activity.

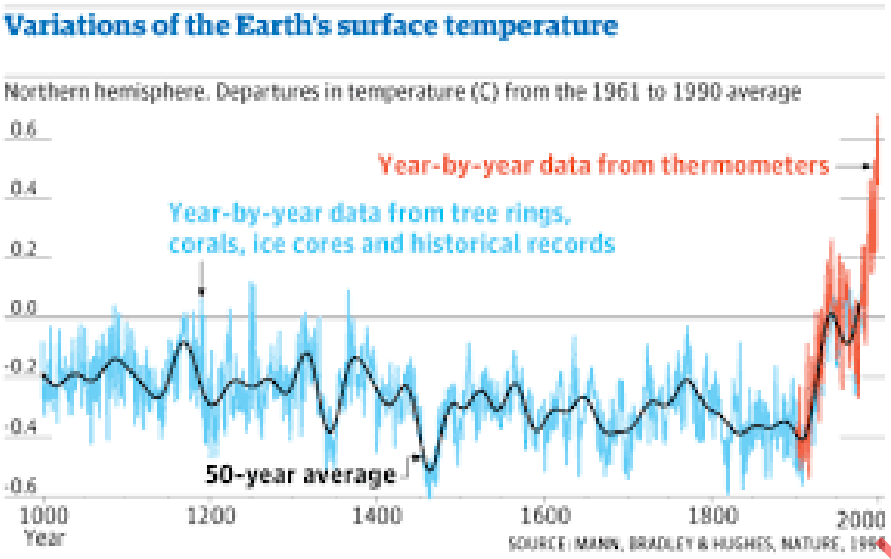


Figure 1. The hockey stick graph from the Journal Nature.

The hockey stick graph (Fig 1) is remarkably devoid of natural variation over time, which makes the hook at the end extremely distinctive. The unfortunate problem with this graph is that tree rings are an extremely unreliable source of temperature information [1]. Figure 2 shows information for a similar time period which uses historical information to determine temperature in various places e.g. ice skating on the Thames, crop success or failure in Greenland etc. What we see now is the existence of the little ice age and the medieval warm period which are recorded in history. This information shows that there is no hockey stick as world temperature is seen to vary naturally over time, making it much more difficult to attribute significance to the current small increases in average world temperature.

Now you may be starting to wonder if climate crippling measures are justified to endeavour to regulate something that may be varying only naturally rather than due to human activity. So let us consider the role of CO_2 in the atmosphere and the role of water vapour which is by far a more significant greenhouse gas [1].

The CO_2 concentration has been increasing in the atmosphere (Fig 3). However there are still outstanding questions as to whether some of this variation is naturally occurring. These questions are compounded by the large amount of CO_2 absorption of CO_2 by the earth ecosystems that has been inferred by the scale of industry output [1].

CO_2 is actually a trace gas in the atmosphere at 0.04% and as such it cannot be used to directly explain global warming. Its effect rather has to be to in some way to upset the balance between water vapour in the atmosphere (which is a powerful greenhouse agent) and liquid water (which has little direct effect on the retention or loss of heat by the atmosphere) [2].

The IPCC models this and uses positive feedback for the effect of CO_2 on water vapour balance and the subsequent retention of more heat on average, resulting in a severely pronounced effect of CO_2, see Appendix 1. There is however mounting evidence that the IPCC has so far ignored, that the feedback is actually negative feedback, which would mean that the actual effect of this trace gas CO_2

on global temperature and other weather phenomena affected by this, is insignificant [2]. We expect the weather models to improve over time and to more accurately reflect factors of this nature.

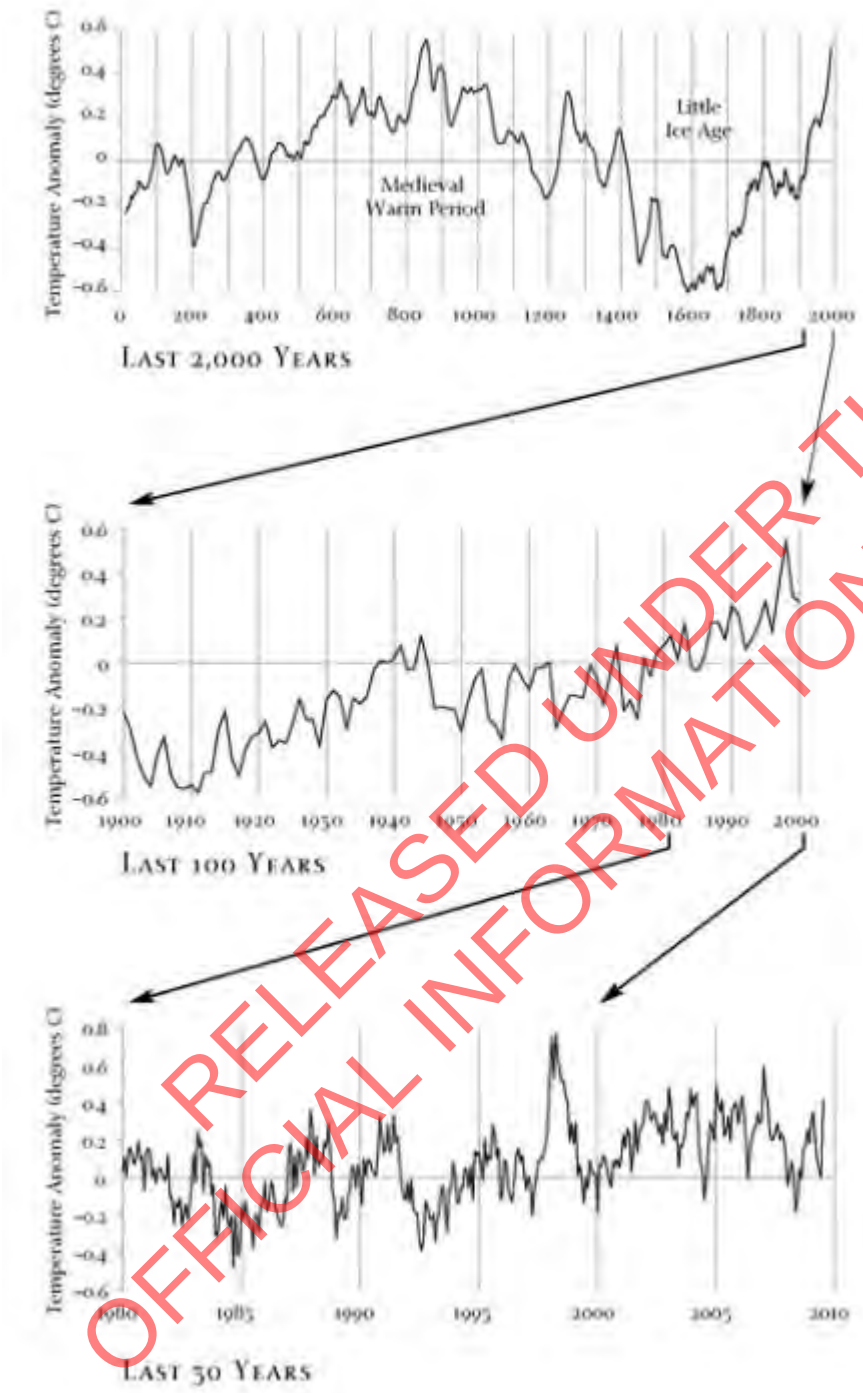


Figure 2. The global temperature changes obtained from historical information [1].

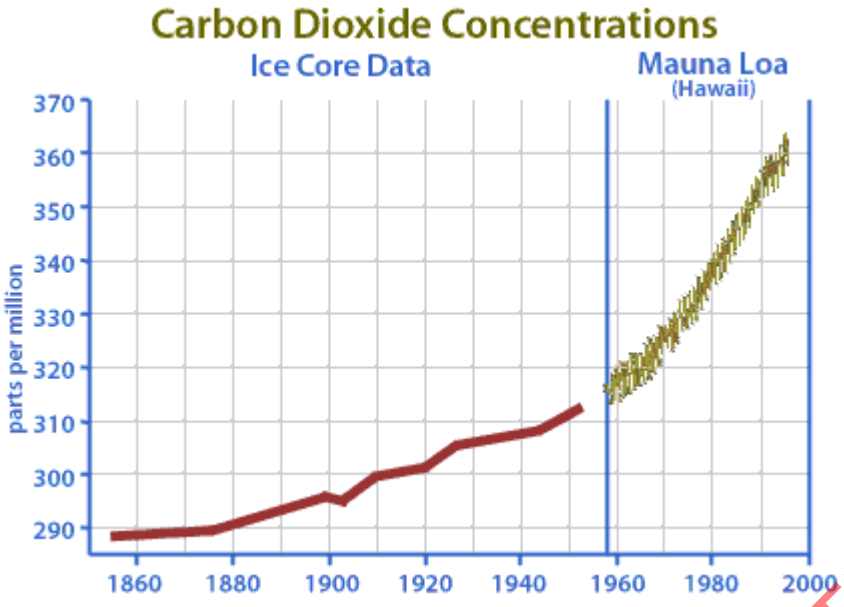


Figure 3, Atmospheric Carbon Dioxide Concentrations (2004)
http://www.cotf.edu/ete/modules/climate/GCcarbon1.html Wheeling Jesuit University.

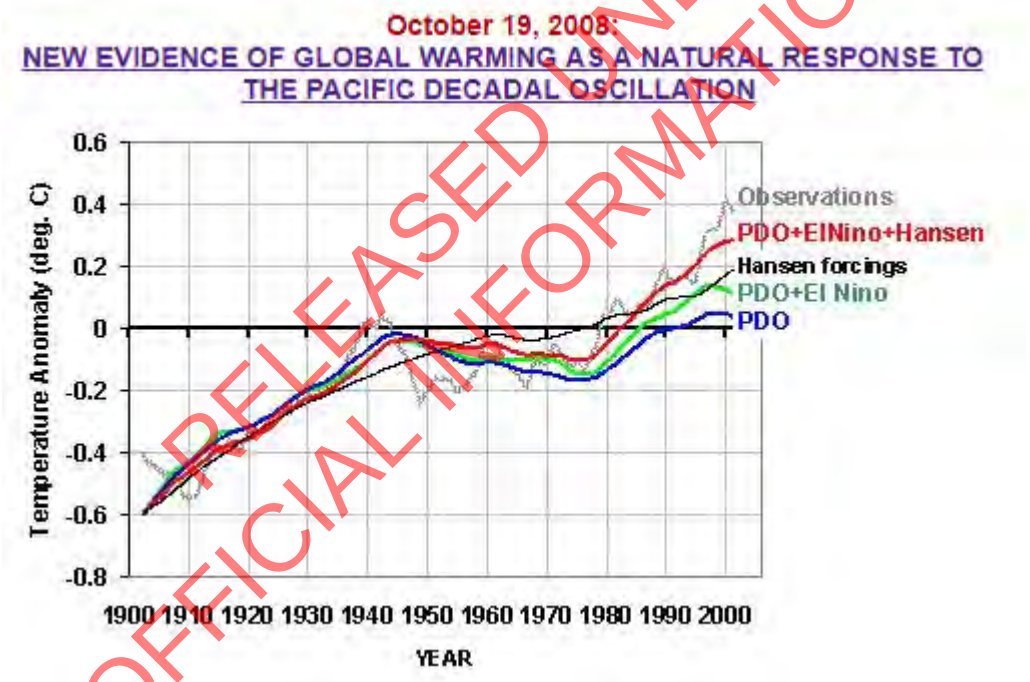


Figure 4, The Pacific Decadal Oscillation

Here I introduce the Pacific Decadal Oscillation (Fig 4), which is an environmental cycle that occurs over 20 to 40 years that behaves in similar ways to El Nino and La Nina. Now I quote the author of [2].

"Now, one would think that the IPCC reached its conclusion that mankind very likely caused the recent warming after ruling out natural climate variability, like that associated with the PDO, as a

cause. But the truth is that they never seriously investigated it. The IPCC has taken for granted that there are no natural variations in global average temperatures once one gets beyond a time scale of ten years or so."

"Specifically, the IPCC's most important (and incorrect) assumption is that the average cloud cover of the Earth always remains the same. It is well known that the primary role of clouds is to cool the Earth, and so any long-term change in clouds is a potential source of global warming or cooling. The 2007 IPCC report does indeed mention the Pacific Decadal Oscillation and other types of multi-decadal variability, but for some reason never asks the obvious question: Could these natural climate fluctuations cause a change in global cloudiness?"

Figure 4 show that the Pacific Decadal Oscillation pattern coincides with the pattern of average global temperatures over the last one hundred years suggesting that these recent changes in temperature may be natural in origin and might also be expected as a result of the end of the Little Ice Age.

You might now be wondering how well justified drastic changes to the economy might be as a result of a belief that we can alter something that was caused mostly naturally rather than by the effect of human activity. If this were the case then modifying our output of CO_2 in an at empt to regulate nature may be ineffective.

Because of the severe uncertainties and incorrect cien ific foundations in the basis of the argument establishing this climate action, I believe that it is unjustified to implement extreme measures as a response, that would severely damage the economy. Rather I think that it is justified to take smaller steps towards feasible use of renewable energy that avoid significantly damaging the standard of living and lifestyle of New Zealanders. This would allow time for the climate models to be improved to the extent that better decisions toward the future of New Zealand can be made.

Appendix 1

The key unanswered question from the body of the submission is as to what evidence there is for increasing carbon dioxide content of the atmosphere to cause the small increases in temperature that we have seen, coming out of the Little Ice Age. The reference to small increases in temperature relies on knowledge about past naturally caused temperature fluctuations, which will be discussed here, see Fig 5

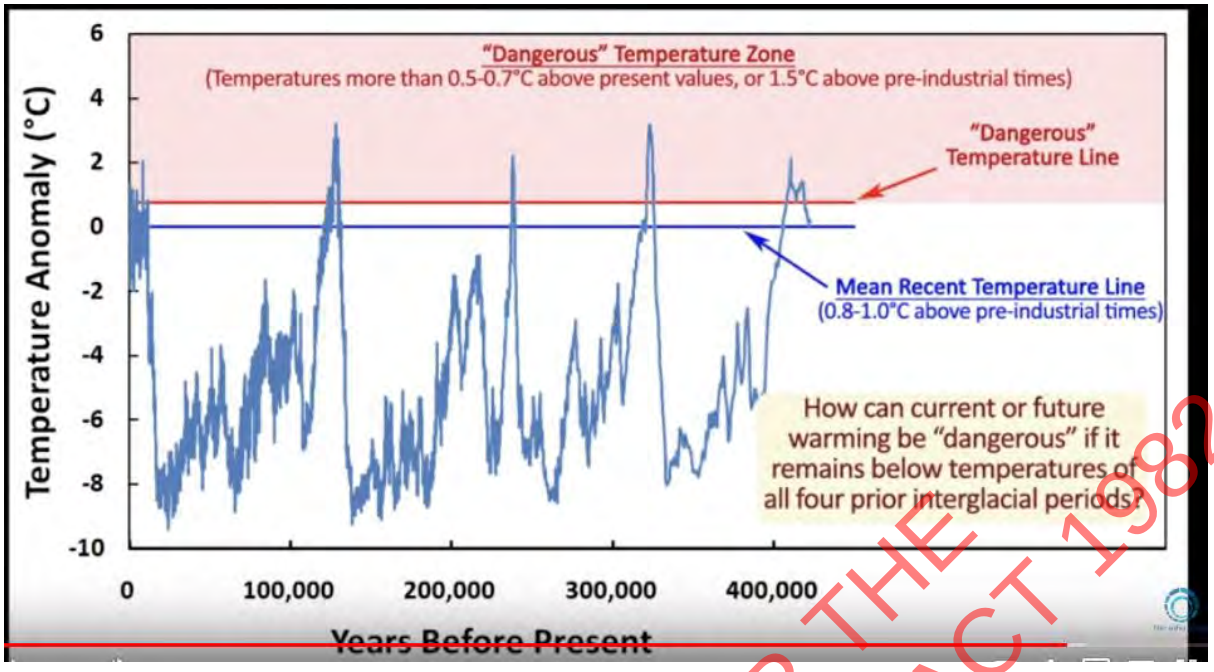


Figure 5. From [3].

The following is quoted from [4]

"2.1.1 Correlation with Temperature

According to the IPCC, the global warming of the mid- to late twentieth century and early twenty-first century was caused primarily by the rise in atmospheric CO_2 concentration. This assertion is controversial (see Smagorinsky *et al.* (1982) and Idso (1982) for early pro/con positions on the issue), and with the retrieval and preliminary analysis of the first long ice core from Vostok, Antarctica—which provided a 150,000 year history of both surface air temperature and atmospheric CO_2 concentration—the debate became even more intense. The close associations of the ups and downs, *Fig 6*, of atmospheric CO_2 and temperature evident during glacial terminations and inceptions in that record, as well as in subsequent records of even greater length, led many supporters of the CO_2-induced global warming theory to assert those observations proved anthropogenic CO_2 emissions were responsible for twentieth century global warming. This contention was challenged by Idso (1989), who wrote, "changes in atmospheric CO_2 content never precede changes in air temperature, when going from glacial to interglacial conditions, *Fig 7*; and when going from interglacial to glacial conditions, the change in CO_2 concentration actually lags the change in air temperature (Genthon *et al.*, 1987)." He thus concludes, "changes in CO_2 concentration cannot be claimed to be the cause of changes in air temperature, for the appropriate sequence of events (temperature change following CO_2 change) is not only never present, it is actually violated in [at least] half of the record (Idso, 1988)."
"

Figure 7 requires some explanation as the axes for temperature and carbon dioxide concentration have been adjusted to superimpose. There is in reality an 800 year lead of temperature, meaning that carbon dioxide concentration rise was not the cause of the temperature rise.

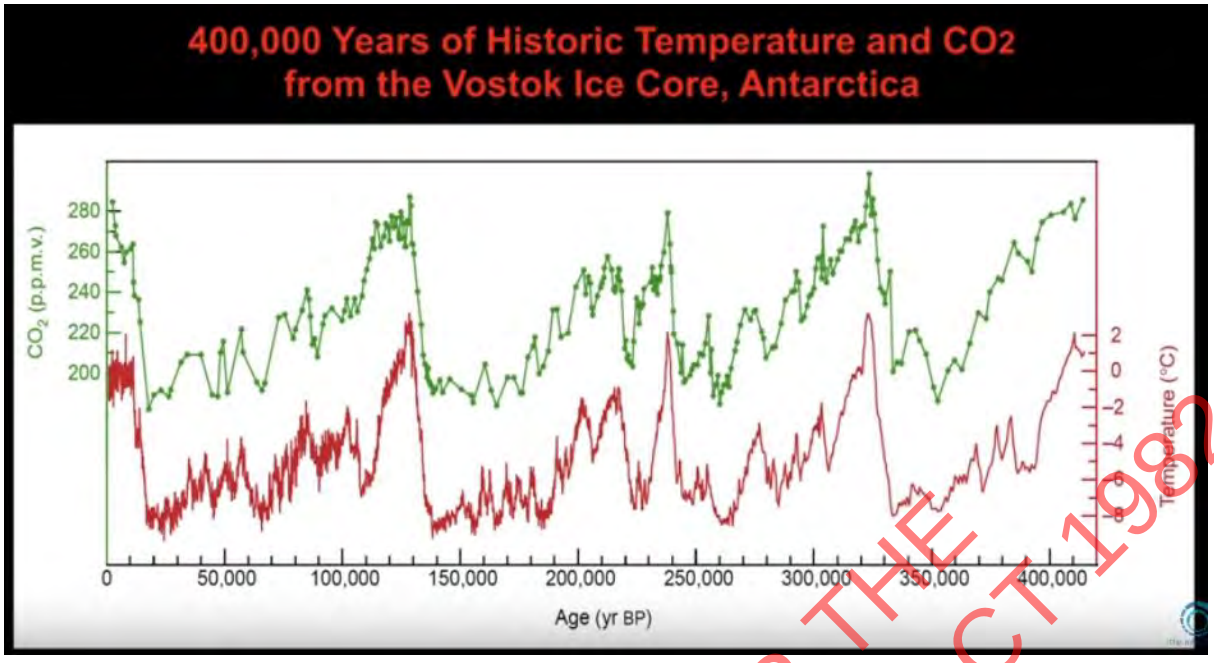


Figure 6. From [3].

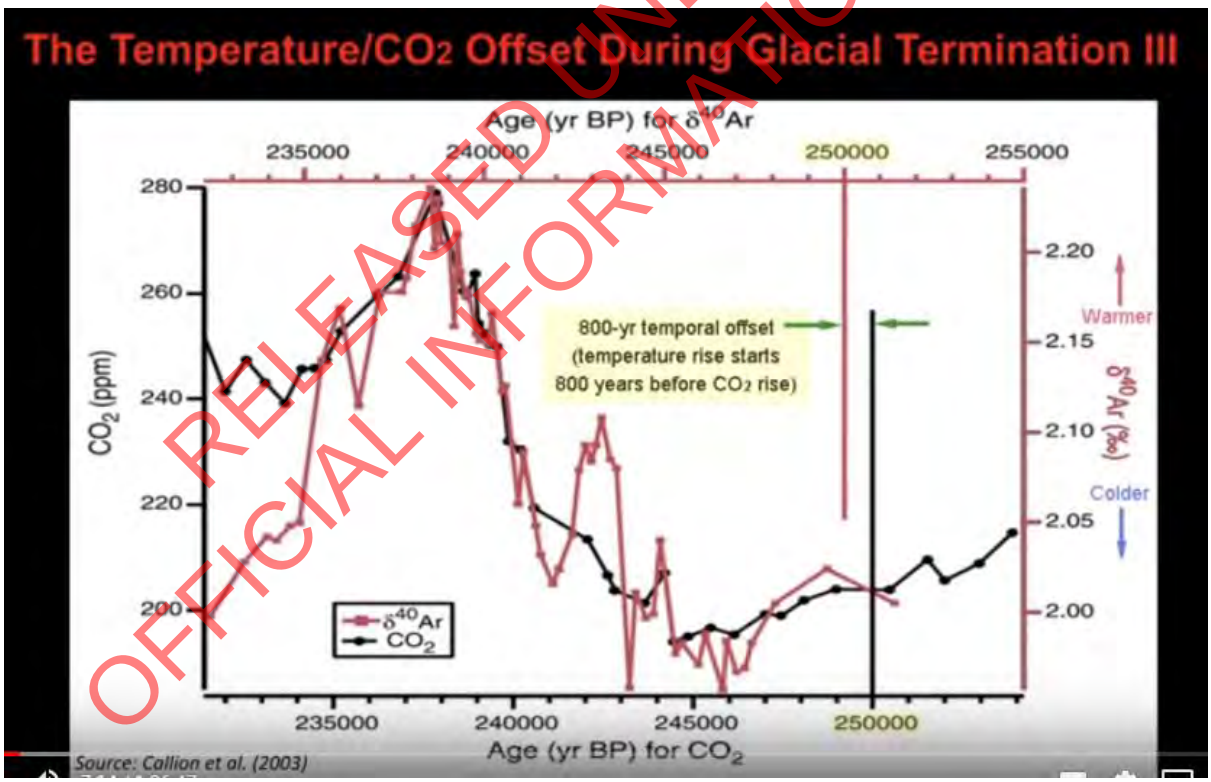


Figure 7. From [3].

Figure 8 shows a further decoupled relationship between carbon dioxide concentration and temperature over the last 10 thousand years.

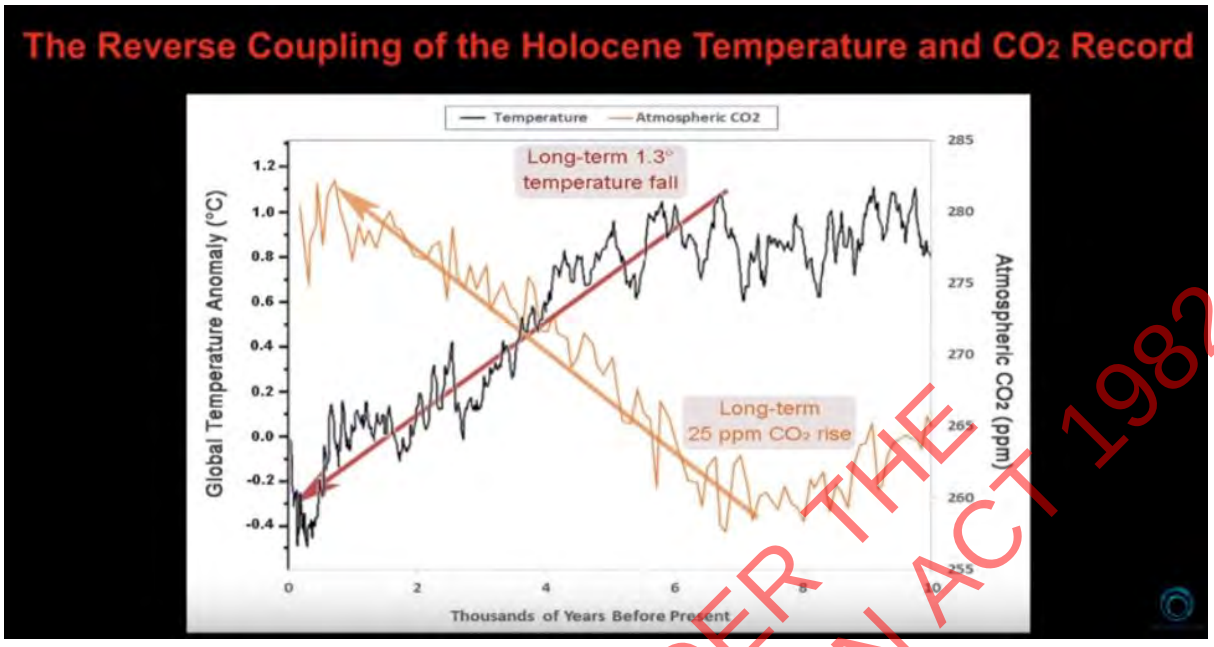


Figure 8. From [3].

Figure 9 details failure of causation of temperature change by carbon dioxide concentration changes.

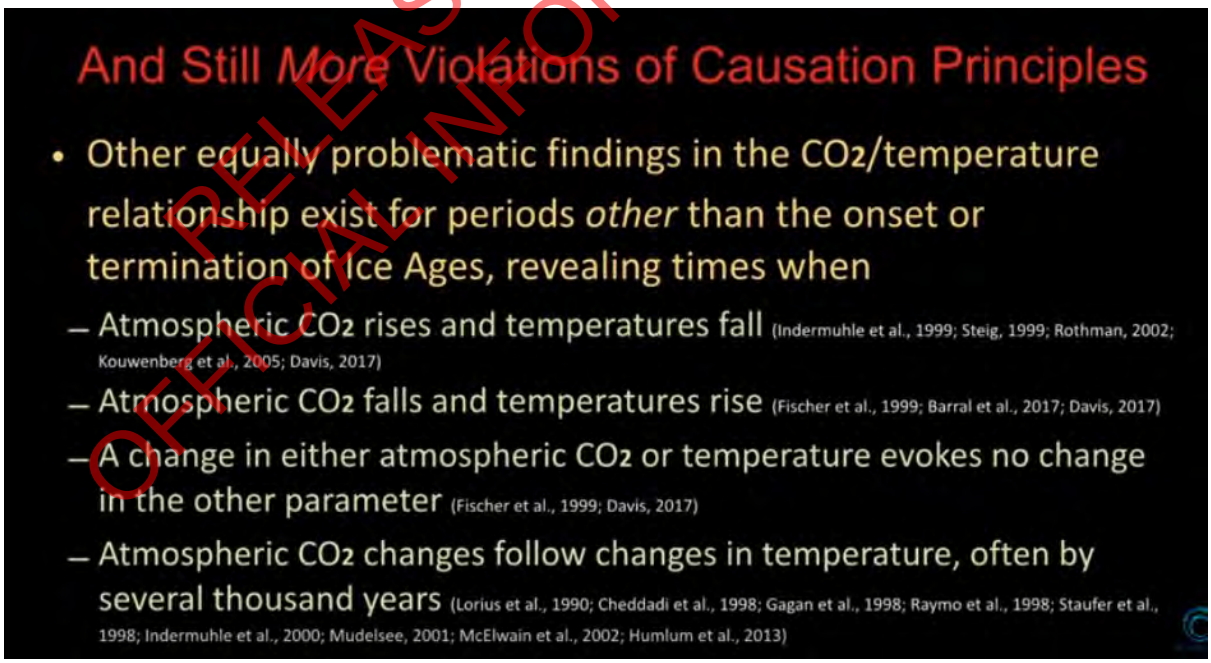


Figure 9. From [3].

An example of correlation failure along with causation over time from 1945-1975 is seen in Fig 10. The modest rate of warming paused while carbon dioxide concentration increased by 20ppm. Also the same rate of temperature increase was seen for a five times greater amount of carbon dioxide.

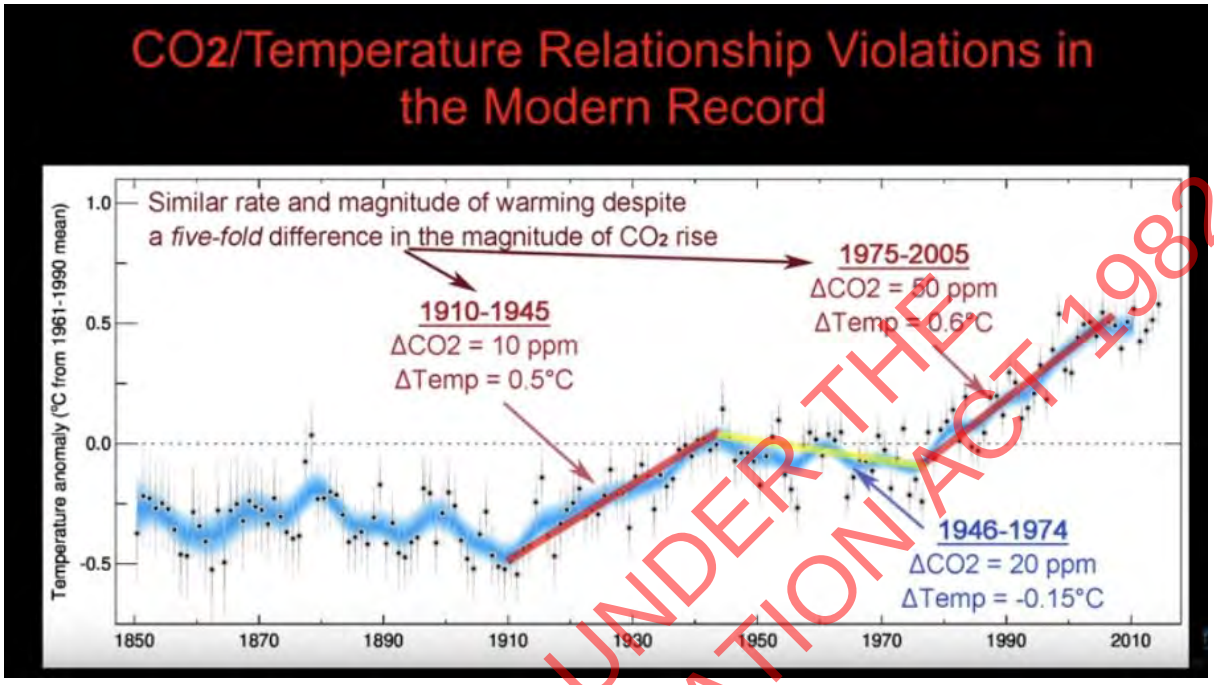
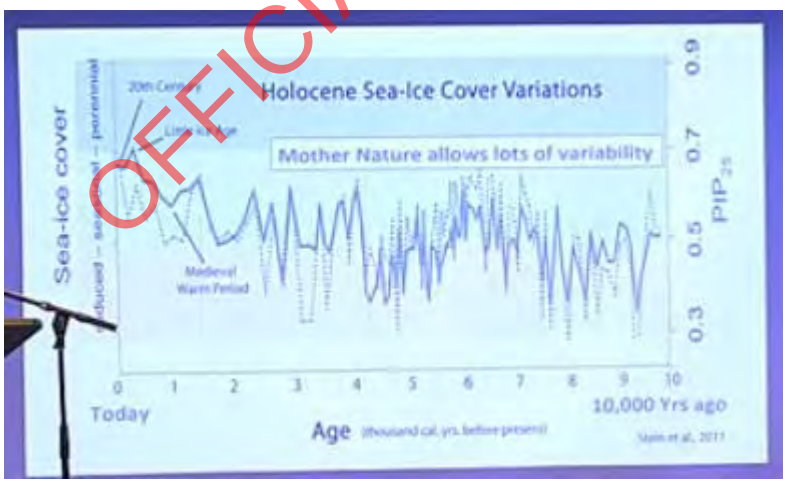


Figure 10. From [3].

Figure 11 shows sea ice coverage for the last 10 thousand years. We see there is a lot of natural variation in the amount of sea ice cover, which changes the perspective on the partial reduction of sea ice that has been observed in the Arc ic. There are even historical records of naturally caused warmer times, when Greenland had colonies of farmers. We are not seeing anything new here.



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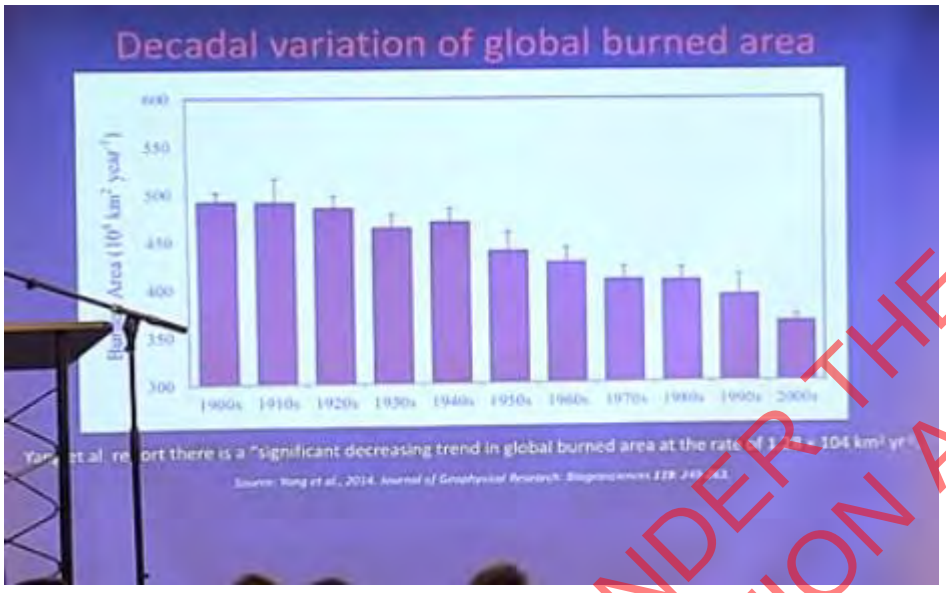

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[4] Idso, C.D, Carter R.M., and Singer S.F. 2013. (Eds.) *Climate Change Reconsidered II: Physical Science.* Chicago, IL: The Heartland Institute.

[5] https://notrickszone.com/2019/07/04/90-leading-italian-scientists-sign-petition-co2-impact-on-climate-unjustifiably-exaggerated-catastrophic-predictions-not-realistic/

[6] http://www.opinione.it/cultura/2019/06/19/redazione_riscaldamento-globale-antropico-clima-inquinamento-uberto-crescenti-anton no-zichichi/?altTemplate=Stampa&fbclid=IwAR1YAoqulAKKXJTY-uzRfSEaX-G6NRpVOckp3nVE7iiTAgOQu8DMHGUxRnE

[7] Idso, C.D, Idso, S.B , Carter, R.M., and Singer, S.F. (Eds.) 2014. Climate Change Reconsidered II: Biological Impacts. Chicago, IL: The Heartland Institute.

Document 26

I would like to make a submission in regards to the Climate Change Response (Zero Carbon) Amendment Bill not as a scientist or researcher but merely as a concerned citizen (which makes me as qualified as any politician who also is not a scientist) that like many other working class will have to pay the price and suffer the sacrifices required by the passing of a zero carbon bill. I am concerned because much is at stake with the drastic measures that are required to take NZ back to a time in history of zero carbon.

Firstly, I think it nothing short of appalling at children are being taught that the world is on the verge of disaster, our existence is in crisis or the earth is dying. They are taught anyone who questions the "crisis" is a "denier" (a word specifically used because its holocaust connotations) or even those questioning validity of this "crisis" are themselves part of the cause of the earth dying. Just take a look at slogans on the signs of the children during climate strikes, they are full of panic, scare tactics and accusations. So of course this will result in stampedes of children taking time off school telling us adults that we are destroying their future by not becoming alarmists and sharing in their struggles for survival. Who is teaching our children this utter nonsense? It seems like an attempt to create a false morality among well-intentioned people.

Most of mankind is better off today than in any time in the history of civilization. No one in New Zealand is dying of hunger, or suffering great anguish as a result of increased levels of CO2 or increased temperatures. Our food production is not in any danger (has never been more productive actually), our forests are healthy and strong (increased CO2 has led to "greening" across the globe – as confirmed by NASA satellites https://www.nasa.gov/feature/goddard/2016/carbon-dioxide-fertilization-greening-earth), no one is walking around with masks on their face (like many do in Asia) due to pollution in the air. Basically, children should be taught real science, objectivity, to be able to discuss both points of view, not frightened of their future and not be manipulated into being social justice tools by teachers and socialist unions. The truth is that the use of fossil fuels has lifted millions of people in the world from poverty. Is there another time in history that anyone in their right mind would want to live compared to today? The people in denial are those that think industry can reach zero

carbon rates without severely impacting the economy. Children are not taught the serious consequences of what eliminating fossil fuels from our lives means to them.

Humans and nature are all part of life and as such it is simply wrong to teach children that humans are the enemies of the earth. Children should be taught about the earth's environmental history, that climate change is natural and has been happening since the earth's creation. There are so many "green untruths" being propagated by the United Nations, encouraged by politicians and fed to the masses by media while scientists who differ question or speak out are silenced, ridiculed and mocked.

It seems the inspiration of the climate strikes in New Zealand has been a child in Sweden. Suddenly a child in Sweden who skips school to save the world is a hero but scientists (who did go to school) are ignored? It is ludicrous. I have researched this hero girl from Sweden named Greta and in my opinion this child has been manipulated by her mother who wrote in her book, "Scenes from the heart" that her daughter has the ability to see CO2 (an invisible, odourless gas which is essentially plant food) with the naked eye. Greta has suffered previously from depression and currently suffers from OCD and Asperger's syndrome. Greta has been quoted as saying to children, "I want you to panic". Well, I don't want my children to panic. I want them to think rationally and calmly but that's not what people do in emergencies, is it? This debate is about politics and power, not science and truth. Instead of actual scientific date we have politicians yelling the world is coming to an end in 12 years like a medieval doomsday cult. (i.e.- Catherine McKenna environment minister in Canada screaming at a crowd we have only 12 years to act). What about MP's thinking rationally and calmly before making decisions that will impact our future economy in ways no child has the wisdom to imagine?

Having lived outside of New Zealand for several years in Asia I can assure you the primary concern in countries like India, China, South Korea, Japan and other economic power houses is how to keep improving their thriving economies. Sure, they want clean air and rivers but the idea of terrifying children into believing they have no future would be unacceptable. Children in South Korea look forward to a bright future and would think it strange children in New Zealand skip school under the pretence the earth is doomed unless we act now. Spreading alarmist theories to children would be

considered counter- productive. During hot summers in South Korea the government works with the power companies reduce their electricity prices so that its citizens do not suffer financial hardship because of running their air conditioners to stay cool. This year is no exception. https://pulsenews.co.kr/view.php?year=2019&no=382572. How many NZ families suffer hardship to keep their homes warm already now in the winter?

Let's face the reality of the impact of NZ's zero carbon bill would have on the globe. Any drop in the bucket New Zealand would make in emissions compared to these economic power houses of Asia is insignificant (although that drop in the bucket has the potential to cause great harm to our economy). For example an article in the Straits Times notes that China will add 700 new coal fired power stations over 20 years, 10% of which are being built now, and will add a double today's Chinese CO2 emissions at the same time. https://www.straitstimes.com/asia/east-asia/chinese-firms-to-build-700-coal-plants. China's percentage of total CO2 emissions is 29.34% whereas New Zealand's share is only 0.10%. China has made no commitment to reduce CO2 and even if they had they have been known to break their promises. There are claims by environmental groups that China is still using the banned (under Montreal Protocol) CFCs. https://www.firstpost.com/world/factories-in-china-still-using-illegal-ozone-depleting-cfcs-claims-uk-based-environmental-investigation-agency-report-4696091.html

A group that would be highly impacted in New Zealand would be farmers. Reducing carbon emissions would mean selling stock as I understand they are not allowed to offset their carbon footprint by planting trees. New Zealand's farmers already have a low carbon footprint compared to farmers in other countries. This would mean New Zealand has less food to export and less food to feed our own population which in turn means we need to import food that has been grown in countries who (like China) aren't the least bit concerned about their carbon footprint which in the end offsets the whole exercise. Professor Michael Kelly (NZ / British Physicist) gives the following example which happened in the UK: "Aluminium production is highly sensitive to energy prices, and most of the UK smelters have closed down – helping us reduce UK emissions, but also exporting jobs. No one describes the consequence: we now import that aluminium

from China, leading to CO2 emissions from shipping it here. Worse, most electricity in China is produced by coal, not gas, as in the UK. We are exacerbating the original global problem of global CO2 emissions.....".

Less food, less farmers...seems like a no win situation which is why Article 2 of the Paris Agreement states, "increasing the ability to adapt to the adverse impacts of climate change... *in a matter that does not threaten food production'*. So New Zealand even goes so far as to ignore its obligations under the agreement in trying to virtue signal to the rest of the planet.

According to agrobiologist and scientific researcher Dr Albrecht Glatzle, "The warming potential of anthropogenic GHG emissions has been exaggerated, and the beneficial impacts of manmade CO2 emissions for nature, agriculture, and global food security have been systematically suppressed, ignored or at least downplayed by the IPCC and other UN agencies." Albrecht Glatzle is retired director of Research of INTTAS Chaco, Paraguay.

Once the government destroys the farmer's livelihoods will it be time to turn to the tourism industry to meet the carbon zero compliances? All those airplanes bringing in tourists, as well as the cruise ships will have to be stopped. They both emit excessive amounts of CO2 into the air. Or the government could simply add a higher tax burden on the airlines / cruise industry and price them out of business indirectly. There are plenty of nice places on this planet to visit where climate emergencies have not been declared where tourists are happy to spend their hard earned money. Frankly, New Zealand is already an expensive place to visit and adding more taxes or making it too expensive to visit won't attract more tourists but it will kill lots of tourism jobs in New Zealand. When you start limiting people's access to energy you limit their ability to live in comfort, you limit their mobility, you in effect limit their choices.

Another issue is the whole issue of "carbon" itself. Just the term "carbon pollution" is ambiguous at best, as certainly CO2 is no pollutant though the striking school children on the streets think it is. CO2 is simply an odourless gas (and invisible despite Greta's

mother's claims) which plants need to survive, without enough of it all plant life on earth dies. Higher CO2 levels have been proven to be beneficial for agriculture which is why it is added to greenhouses to increase plant growth. CO2 levels have fluctuated throughout the earth's history. That is not to say there are not unwanted waste products of combustion particularly from cars that cause air pollution but these can be greatly reduced by efficient emission controls systems on cars as have been introduced in Europe. Electric cars are more expensive to buy as well as to make, as well they are made in countries producing larger levels of pollution. You may feel good about yourself if you own an electric car but that car's production increased emissions elsewhere.

Then there is the issue of batteries. What to do with the millions of used and useless batteries once they die which they most certainly will. Perhaps ship them all to China to dispose of? I don't think so, they aren't taking the world's rubbish anymore. How about a poorer country like the Philippines? No, they just sent a ship load of trash back to Canada that had been sitting in the Philippines for 6 years which was supposed to have been recyclable goods but turned out to be real rubbish. How much CO2 is emitted just transporting cargo ships full of rubbish around the world to developing countries? That's just dumping your problems on someone else. https://www.reuters.com/article/us-philippines-canada-waste/philippines-sends-trash-back-to-canada-after-duterte-escalates-row-idUSKCN1T10BQ

It also concerns me that the science the New Zealand government is using to back up its justification for zero carbon is mainly based on findings by the IPCC which is politically motivated, and predisposed to believing that climate change is a problem in need of a U.N. solution.

There are numerous reputable scientists around the world for example the NIPCC (Non-Government international Panel on Climate change) who do not agree with the alarmist agenda. NIPCC has no formal attachment to or sponsorship from any government or governmental agency. NIPCC have stated openly that none of the NIPCC reports have been funded with corporate money. It are funded by family foundations that have no interest in the energy sector. It is wholly independent of political pressures and influences and therefore is not predisposed to produce politically motivated conclusions

or policy recommendations. There are two New Zealanders who are listed as Chapter Contributing authors: 1. Barry Brill OBE, JP, and Former MP, Associate minister of energy and science (ret) who quoted of this Zero carbon bill, "this Bill is not only the most expensive (by orders of magnitude) but might also be the most dangerous piece of government legislation ever placed before New Zealand's House of Representatives." 2. Bryan Leyland - a consulting engineer specializing in electricity generation and transmission, chairman of the economics panel of the New Zealand Climate Science Coalition, Master's degree in power system design, Distinguished Fellow of the Institution of Professional Engineers, New Zealand, a Fellow of the Institution of Mechanical Engineers and a retired Fellow of the Institution of Engineering and Technology. He states," I am seriously sceptical of claims that global warming is man-made, real and dangerous. These predictions rely upon computer models that failed to predict that there would be no warming for the last 18 years. This means that they are worthless. "

In a free and open society without bias, children would be taught both perspectives. For example my son had a report on ocean acidification to do for school. His report expressed only one point of view, one side of the scientific argument. When I suggested other sources of information which presented other findings, my son's response to me was that he doesn't care what the truth is, he wants a good grade and that means writing what the teacher wants to hear. So much for intellectual curiosity. I feel that politicians are doing the same, they don't want to listen to both sides of the argument or listen to the science....they see climate emergency as a way to generate more tax revenue or to make an historical stance on the international scene at little cost to them but cost to tax payers. As I stated, I am just an ordinary citizen without any science background. That's why I research and listen to what learned scientists tell us. I see who is funding their research and what their mandate is. Around the world thousands of scientists have concerns with the current climate alarmist agenda of the IPCC (government scientists) either disagreeing with it entirely or thinking the alarmist agenda goes too far, or it has flaws in its claims and further research is needed. Some examples include:

Prof Joseph D'Aleo – a certified consultant Meteorologist and 1st director of "the weather channel" in the US; Prof William Happer - Princeton University; Dr Nils Axer Morner - (Sweden); Dutch Prof Richard Tol - teaches the economics of climate change in Amsterdam; US Prof Frederick Seitz - past president of the National Academy of sciences; Prof Richard Lindzen - atmospheric physicist and prof of meteorology at MIT; Dr David M. W. Evans who consulted full time for Australian Greenhouse office (now Dept of climate change) and is a Mathematician and engineer holding 6 university degrees; Dr Patrick Moore PHD in forest biology and founder of Greenpeace who states that the environmental movement "abandoned science and logic in favour of emotion and sensationalism"; Dr Craig Idso - founder, former president and current Chairman of the centre for the study of Carbon dioxide and global change; Dr Edwin Berry - certified consulting meteorologist for the American Meteorological society; Viv Forbes - (Australia) a geologist and financial analyst with an interest in energy policy; Dr Ole Humium - Professor at University of Oslo in Norway, former scientific director of University of Copenhagen Arctic station who argues that climate change is a natural phenomenon, Judith A. Curry - American climatologist and former chair of the School of Earth and Atmospheric Sciences at the Georgia Institute of Technology, former professor of Atmospheric and Oceanic Sciences at the University of Colorado-Boulder who has held faculty positions at Penn State University, Purdue, and the University of Wisconsin-Madison, co-author of Thermodynamics of Atmospheres and Oceans (1999),[14] and co-editor of Encyclopaedia of Atmospheric Sciences (2002); Dr. Timothy Ball – Professor University of Winnipeg, Canada who has a PHD in Geography with a specific focus on historical climatology; DR. Hemann Harde - Professor of Engineering and materials science at Helmut-Schmidt University, Hamburg, Germany (ret); Ian Clark- Professor in the department of Earth Sciences in University of Winnipeg; Peter Stibs- Professor in physical chemistry at Royal Institute of technology in Sweden who describes the climate projections of IPCC as inadequate and misleading. Ian Plimer – Australian Geologist, professor of earth science at university of Melbourne, member of academic advisory council for global Warming policy foundation. In his book Heaven and earth he states "climate models focus too strongly on the effects of carbon dioxide, and do not give the weight he thinks is appropriate to other factors such as solar variation". Myron Ebell –

director of Global warming and International Environmental Policy at the Competitive Enterprise Institute in Washington DC. He advocates for "sensible energy policies that benefit everyone instead of polices that simply react to alarmism". Dr Roy Spencer - principal research scientist for the University of Alabama in Huntsville, as well as the U.S. Science Team Leader for the Advanced Microwave Scanning Radiometer (AMSR-E) on NASA's Aqua satellite. He is known for his work with the satellite-based temperature monitoring for which he and Dr John Christy received NASA's Exceptional Scientific Achievement Medal. In one of his speeches on global warming he stated, "the longer you go (doing research)....you get more questions than answers". Dr Jay Lehr - Senior Policy Analyst with of the Ottawa, Canada-based International Climate Science Coalition (ICSC). Cliff Ollier - Australian geologist Cliff Ollier who stated," Marine life flourishes where CO_2 is abundant. "Professor Michael Kelly FRS FREng - Professor of Technology in the University of Cambridge and former Chief Scientific Advisor to the UK Government, is a New Zealander and Fellow of the Royal Society of London and the Royal Academy of Engineering. "New Zealand is taking steps of great and certain futility and destruction of capital value". He says that the Royal Society scientists have adopted a role of 'lobbying' and in doing so 'they jeopardise their purpose and integrity.' (Prof. Michael Kelly / Daily Mail news article) Suffice to say the science is far from settled and there are many unanswered questions.

Also, it seems several prominent scientists in New Zealand have called to question the integrity of the RSNZ in regards to their position on climate change:

An open letter from the NZ climate science coalition October 2018, (signed by Professor Emeritus Geoffrey G Duffy DEng, PhD, BSc, ASTC Dip., FRSNZ, FIChemE; Dr Doug Edmeades, MSc (Hons), PhD, Dip Mgt, ONZM; Bryan Leyland, MSc, DistFEngNZ, FIMechE, FIEE(rtd), MRSNZ; Gary Kerkin BE(Chem) Canterbury, MEngSc (Melbourne); Dr Jock Allison, ONZM, FNZIPIM; Don Esslemont; Terry Dunleavy, MBE, MRSNZ, FWINZ; Richard Treadgold; Dr John McLean; John Sexton; Don Nicolson) states, "That the RSNZ claims that humans cause dangerous global warming without being able to provide supporting evidence is scandalous." As well as, "The RSNZ admit that climate change is contentious but will not debate it." So the RSNZ recognizes that the science around climate change is not settled but suppresses debate? If this is the case, how can they be

trusted by a layperson such as myself? What I see is one group of scientists that wants open debate and another group that has the meaningless title "Royal" in their name and insists the science is settled. Case closed. Why does this not set off alarm bells in anyone who just wants to discover the truth?

The point is that the science is not conclusive, the scientists above I've mentioned and others don't make claims the debate is over only that more debate is needed. It is not that one side is right or wrong, only that there is disagreement and it is about time we recognize that fact. It shouldn't be a controversial assertion to say we need to keep an open mind on the issue of causes and effects of climate change. There is still so much to learn and making policies which have the potential to cause so much damage to the economy as a symbolic gesture to the unelected officials at the United Nation as seems irresponsible of a NZ government that was elected to ensure the well-being of it citizens first and foremost and not cave in to radical groups such as extinction rebellion or uniformed striking school children.

In conclusion I would like to add one detail which is often lost to those who scream loudest for government action against climate change especially by the young people urged on by teachers or socialist groups such as https://iso.org.nz/ (who were responsible for attempting to disrupt the National minerals forum in Dunedin, a conference which added many thousands of dollars to the local economy) .....unlike those who demand action for others (including most politicians) but make no changes in their own lives I don't own a car, live in a small home, I use buses (often I am the only passenger on the city buses) or I walk / bike (although I don't give up international travel as I have family in various parts of the globe), I recycle, buy second hand from markets, fairs, trade me and grow food in my garden. I care about the environment but don't believe in following hysterical cults telling me the world is ending soon if I don't act now. That type of scare tactic rubbish has been around for ages. I only mention this because the government officials or activists who claim to fight climate change seem to do so for appearances only or virtue signalling but usually make the largest carbon footprints of all. For example Ministry of Environment in NZ spends $45,000 a month in airfares in

the battle against climate change. https://www.stuff.co.nz/national/politics/109786626/ministry-of-environment-spends-45000-a-month-in-airfares-in-the-battle-against-climate-change#comments. The taxpayer's union in NZ has stated, "We argued councils should stick to their knitting (roads, rubbish, rates) instead of throwing money and attention at fashionable global issues." If city councils and other politicians they truly believed in this agenda they would practice what they preach because you just can't have it both ways. Either you "save the earth" which means you set an example or you lead a comfortable life but demand that others make sacrifices. I can think of no better (and telling) example of a politician's hypocrisy on this question than the laughable answer PM Justin Trudeau of Canada gave when asked what he and his family do to cut back on plastics. https://www.youtube.com/watch?v=LMJ8UJ8wEiY. Children can be forgiven for not realizing how lucky they are to live in modern times, for not realizing that no one in history has had it as good as they do, for not knowing fossil fuels have lifted millions from poverty, for believing the world is about to end soon but governments have a responsibility make informed decisions, to act with professionalism, caution and in the best interests of its citizens.

Document 27

Item of business :

Climate Change Response (Zero Carbon) Amendment Bill

Submission name :

Wallace Westland

Comments

A) Public policy involving projected massive damage to the New Zealand economy should not be made on the basis of climate models that are problematic. Even the strongest advocates of the accuracy of the models admit they are not accurate e.g. Dr Gavin Schmidt, IPCC reports, etc

Highly acclaimed scientists like Judith Curry, Roger Pielke, John Christy and Roy Spencer have produced well-researched papers pointing out the serious divergence between predictions of temperature rise and actual and why they have occurred.

B) Temperatures have risen by 0.7 to 1.0 degree C in the last 50 70 years depending on location, recording methods, timing, start dates etc. There is no evidence that this temperature rise has had any detrimental effects on the weather. Why should another degree cause catastrophic conditions?

C) Almost all record of weather events since so-called warming began, show positive gains, improvements and fewer catastrophes.

D) Increases in CO2 have been highly beneficial to the world s vegetation and crop outputs, helping combat hunger.

E) If New Zealand, which produces less than 0.2% of the world s so-called man made CO2 emissions, takes drastic action and few other countries do, the detriment will be hugely exacerbated. We will become even more uncompetitive as exporters in world markets that we are reliant on more than most other countries.

F) The work output of the IPCC is largely political rather than scientific. Its very raison d etre was not to investigate climate changes in an unbiased manner but to prove the existing meme. Funds have been made available to scientists who shout the loudest about problems arising from warming even bizarre claims totally unrelated to weather or climate, while scientists wanting to offer theories and ideas in opposition have been closed down, under-funded, derided, squeezed out of their jobs etc.

G) Multiple claims made over the last 50 years have not been validated. Polar bears extinct, arctic ice disappearing, falling food production, climate refugees in NZ, no more snow, etc.

Recommendations

This bill should not be rejected.