#21

Submission to Climate Change Commission by former the University of Auckiand, Fisher&Paykel Industries, Transpower and other companies

The three major points I wish to make in my submission are as follows:

1.SET REALISTIC TARGETS

New Zealand should be a good world citizen and set difficult emission targets under the Paris Agreement, but NOT aim for EXTREMES that would result in a very heavy burden on our economy in the future.

In my opinion it is better to meet more modest, INCREMENTAL, targets and spend additional monies on essential infrastructure in order to mitigate against the effects of climate change.

I believe that the Commission should start it's Report by putting New Zealand's contribution to emissions in PERSPECTIVE with respect to those of the overall world scene.

From the IEA and other sources it is found that our emissions are about 0.17% of those of the world and therefore NOT of statistical significance. This means that any future human-made effects of overall climate change in this country will be determined by the collective emissions of others, particularly China 29.3%, the United States 13.8%, India 6.6%, Russia 4.8%, Japan 3.6% and Germany 2.2%. We will have to adapt to this situation.

An example of an inappropriate target of 100% is with respect to the use of renewables in electrical generation. Even with a high proportion of renewable generation a swing producer is required to minimize and stabilized power prices. Natural gas is recognized the world over as the best lowest emission swing producer. Presently we have the ironic situation of imported coal, with twice the emissions of natural gas, being used at the Huntly Power Station because natural gas is not available.

Similarly your recommendation to close the Ngawha geothermal power station to reduce emissions would be an irresponsible decision with respect to the security of power supply north of Auckland. Best international practice is to have 3 circuits supplying an area, which means that 2 can be out of operation, but power is still provided to consumers. With closure of Ngawha power station, the north of Auckland would have only one circuit feeding the area, not the desired best-practice of 3 circuits.

2. CENTRAL PLANNING and CONTROL

The Commission's recommendations would lead to significant central planning and control of the New Zealand economy, with Government effectively directing much of our lives. As a result I would anticipate that there will be significant resistance to what is proposed. I believe a much better approach would be the use of market forces to determine a carbon price in a well-planned Emissions Trading scheme, together with appropriate regulation.

3. DECIMATION OF HEAVY INDUSTRY

Your Report assumes the closure of Tiwai Point, Methanex and the Refinery. As well you question the viability of NZ Steel. Closure of these activities would decimate our heavy industry sector and reduce diversification of the economy. The above diversification has been deliberately introduced

over the years to give us relief from being an agricultural price-taker with little means of controlling our economy.

Also, these activities will continue offshore, so there will be no net reduction in world-wide emissions, which could even increase. How will the foreign exchange earnings from these activities be recouped, if at all?

The same exodus will occur with other of our energy intensive industries, such as cement production and forest products, if carbon prices are too high. The danger of this happening on a worldwide basis is that power will shift to those countries that fail to reduce emissions and leave those that do impoverished.

Other points I wish to make are as follows.

1.ELECTRIC CARS.

I believe that the uptake of electric cars will be slower than Government would like without large subsidies to encourage their use. Headwinds are their high cost with respect to our average value of a car, say \$5-10000, the cost to the user of several \$1000 to install a wall charger for faster charging, and the need to compensate Government for loss of revenue from petrol taxes and road user charges, probably a compensating tax on electricity use. Also, it is estimated that at least \$2 billion will be required to upgrade local electricity networks and the national grid in order to handle the increased power use required for a predominant fleet of electric vehicles.

2. AGRICULTURAL EMISSIONS

I question whether this country's contribution to the present international research alliance to reduce agricultural emissions is of adequate size and sufficiently well-coordinated between the farming and horticultural industries, government research institutions and universities. Also, our research will be limited without the use of genetic modification techniques, presently disallowed in this country, and consequently not be at the cutting edge of the world research scene where we should be.

3. BIOFUELS FROM FORESTS

I draw your attention to the conclusions of the Liquid Fuels Trust Board on this topic as determined in 1987 by Professor A L Titchener, at the time Head of the Department of Chemical and Materials Engineering at the University of Auckland.

To quote, "Because of it's dispersed nature, the gathering of this resource would be very costly. Also, careful management of the forests would be required to maintain productivity over several cropping cycles. This is because a lot of the waste material from forests, in the form of leaves and small branches is required to return nutrients to the soil and cannot be used for transport fuels."

"Two potential transport fuels from forest biomass were investigated: methanol and ethanol. The production of methanol turned out to be the most economically attractive option, but even in this case a crude oil parity value of more than \$US57 (at 1987 costs) a barrel was required, at a time when oil was around \$20 a barrel. Clearly the production of transport fuels from biomass was not commercially attractive: there were better uses for the wood." This is almost certainly the present situation.

4. SUBSIDIES

There are many subsidy costs required in your recommendations. This degree of subsidies is reminiscent of the pre-1984 centrally controlled Muldoon economy. A major lesson from the subsequent Rogernomics deregulation was that if market forces are ignored for too long, the inevitable removal of subsidies can result in significant unplanned dislocations and negative effects in the economy.

I hope the above comments are helpful.

26/2/2021

#22



25/02/2021

NZ CLIMATE CHANGE COMMISSION SUBMISSION DOCUMENT



e Maria de Caracteria de C Caracteria de Caracteria d

Submission Document

This submission is for the future of New Zealand's energy requirements as we plan to achieve a carbon neutral society and the most practical and cost-effective method to achieve it.

Contrary to popular belief hydro power generation can release large amounts of Co2 and in some cases release more Co2 than by power generation. Co2 and methane can be released in greater quantities when run offs from farming, manufacturing and decomposed natural plant material are involved.

Any increase or expenditure in hydro systems would be detrimental to the countries desire for clean energy and would increase Co2 emissions.

The fossil fuel industry already has the expertise and knowledge of hydrogen and ways to produce it recent developments on power generation and hydrogen electrolysers will be quickly become available and cost effective.

Industrial Electrolysers produce electricity by electrolysis which is classed as green hydrogen and powered by wind generators using sea water providing hydrogen locally with no emissions. At present large-scale systems are being deployed in the North Sea to reduce the UK and Europe's dependence on natural gas and oil.

NZ's population has nearly doubled in forty years but our infrastructure has not kept pace and the power grid is near its maximum output and as usage increases and its essential natural gas and LPG should not be restricted.

The gas industry is vitally important to stop people converting to electricity and wood burning appliances, any restrictions on gas could see rolling power cuts and an increase in Co2 before hydrogen is produced in sufficient quantities to replace it. Overseas developments adding up to 30% of hydrogen to natural gas would reduce emissions by a third

The importance of keeping our LPG distribution network will be apparent when hydrogen becomes more available as the same storage and existing gas cylinders can be used without massive change over costs of plant and materials. Advances in gas appliance design would mean existing users like restaurants, commercial users the public and the leisure industry would not be affected.

When you consider NZ total gas usage is .01% of the world's usage and the Marsden point refinery emits more Co2 in three months than the gas industry does in a year the food and beverage industry emit half the emissions of Co2 that gas industry does in the same period. So, think wisely before you open your next can of Coke.

Just by closing Marsden Point refinery we would meet the Kyoto Protocol Co2 targets for NZ. It should also be noted New Zealand Refinery Co in 2020 and recently suggested it could close down. The refinery is a major employer in Northland and it may be possible to centre the construction of hydrogen projects in this area and re train the work force.

The petrol chemical industry is by far the biggest emitter of carbon in the world and is the major reason why huge amounts of carbon in the atmosphere are affecting the world's climate and overheating our planet. Our first priority should replace vehicle emissions and fuel production with hydrogen replacement projects just by doing this will reduce our carbon foot print and if the rest of world could just do that it would be enough to save the planet.

The worlds Co2 levels in April 2020 dropped 17% worldwide due to the enforced pandemic lockdown confirming Co2 emissions from vehicles and aviation burning fossil fuels are the main earth polluters.

NZ converting to a hydrogen economy will save the country billions in imported fuel costs and based on a 15–20-year payback time would be attractive to commercial investment.

Other alternatives like biofuels are not an economic option at present and the amount of Co2 released is comparable to natural gas, biofuels using green waste could produce synthetic fuels to replace high emitting energy users like shipping but the cost of setting up biofuel plants would be extremely costly and NZ should wait for world advances in this area.

The recent forest fires in Australia accounted for more Co2 and methane emissions than the countries normal emission totals in a year and as the earth's temperatures rise, we will see more of these events in the future and as a small country we need to be realistic of what we can achieve with regards to emissions rather than dream how we can show the world.

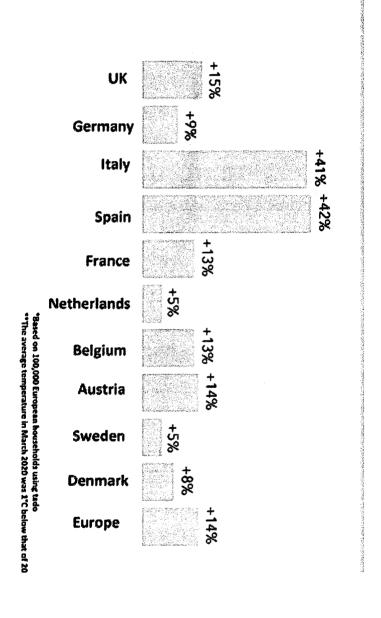
Conclusion: -

Moving to a hydrogen economy would achieve our desire to become carbon neutral it would increase job availability while saving billions on imported fuels and create a massive boost to the country's finances long term and Introducing hydrogen into the NZ economy would be the least disruptive way to proceed.

Therefore: - NZ becoming a hydrogen economy would be the most practical and cost-effective decision NZ could do for our planet and Aotearoa's future population.



NATURAL GAS USAGE IN EUROPE DURING APRIL 2020 PANDEMIC LOCKDOWN WORLD CO2 EMMISSIONS DROPPED 17% DURING THIS PEROD







22 786.2021 The Climate Change Commission Submission analysis team. I would like to make the following submissions 1) Do not discontinue Natural gas as a vital component of heating for many whanganui people. Our council actively encouraged us all to sign up for the gas when ownership was in their hands my looyear old house has only electricity and gas for heating, and power since it was privatised by Douglas has become almost impossible to pay for, whereas the natural gas provides my hot water and partial heating at a much more acceptable COST. 2) what would replace the gas, and at what cost, and who would pay the substantial costs for conversion within my home as my husband and I are pensioners 3) I suggest substantially cutting back any car use Cperhaps introducing carless days as we have had in NZ and it worked very well) would be crucial in the fight against green house gasés, likewise reducing flying. 9 must say an excellent outcome from covid restrictions has been the reduction in plane use. The sky above my house used to have great Kerosene trails across it, with jets criss crossing constantly, since the planes have departed, the sky is once again clearand blue and my breathing much improved. 4) I worry for all our plumbers who at very considerable personal expense fraining to achieve, and then maintain certification in order to maxintain and install natural gas. Will they be substantially re-embursed for their loss of income? 5) Could the commission look closely at rubbish disposal and set up as we used to have collection bins on all streets, so instead of people chucking their wrappers, cans, bottles, cardboard and paper on the road and paths they could be popped in the bins and people employed to collect sort and recycle. 6) Lower the speed whit to 80 on the open Road and 40 in built up areas. This would substantially reduce accidents and green house gases I consent for publication of mysubmission but without identifying information yaer-faithfully

12 - March 2021 To the Sub Mittiens making sis team Climate Change Commision is with sadjuss to lear about the Coal in vies Closing Here on the West Coast a/ct bussonesses private homes and I bom our daisy Co Use Coal. The cost to the local loundser Only 10% of Fleet Ricity Wat her events Storms flood Cuts Eleatricity and if are Coal-gas - or diesel avoilable we'll get by We need a much better Evergy secure Policy Hour what is on the table just

Mow Delive that there is a much better change of succes. a Change In Jee Pand there are some good trials on Smoke grestors - the smoke gets vaceume-pumped 100 m. deep in to the ground, and commes as hard black ston Dan bours in the Metherland. they have Mo natural sesources Their Government try trees to go with out coal to keep the Steel works goin so they get the timber from the by train thou accross the attantie ocean by Ship to + he Metherlands- 4 and to f 45to by thuit about it people We are with dairy freight comes lud using diesel by tru tre Casting down = pritrogen twould cut
= 25-50 % of our vice again With a bit more time and technology we could do Here at home diesel heate Japan - wery cle in mind whe dee isse make your

Introduction

From: Sent: To: Subject: Attachments:)
Submission to the Climate Change Commission from and 19 th March, 2021.	
The main author Dr BE (Chem), PhD is a retired R&D chemical engineer with an extensive career in finding team-based answers for industrial problems in Australia, New Zealand and United Kingdom. Has worked in explosives, cement, water-treatment, polythene film and integrated proceduntrol via DDC. Experienced with large-scale modelling, statistical analysis LP optimization.	trial ess
is a 'stud' sheep farmer at His Company, Limited operates throughout NZ and has business in Middle East Europe, Australia and South America. He has an MSc from Canterbury University. Has a lifetime interest in conservation. Member and Chairman	
Conservation Board for nine years.	***
for rural NZ which give personal and scientific views of many matters of co to farmers. Conservation and Climate Change are frequent topics.	
The attachment outlines the false science of the Green house Gas Effect (Gand is the theme of the submission. A second version is available from or myself. The longer essay outlines in detail the mathematics and	
chemical engineering of the correct science and highlights the miscalculation 25 years ago. Having arrived at a false figure for the solar heat arriving on 8 GhG were named the mechanism by which the temperature rose from -18 (their figure) to the accepted +15.C. The correct science needs no such 'correction'. If fact GhG cool Earth and make the planet inhabitable.	on of Earth
Why did the 'Developed World' with its massive scientific resources, not 'p	eer
check' those early reports?	
Climate Change control is being adopted as necessary for the Planet's survivery it is a salar drivery evel; event. Planing Ch.C. for Clahal Warming is	ival
when it is a solar driven cyclic event. Blaming GhG for Global Warming is incorrect as shown in the papers. Yes, man 's activities have a huge influen	ce
upon the environment with rampant pollution. Hot spots exist where large	

populations of humans congregate, but man-made GhG emissions are not the driver of Global Warming.

The information provided by these papers is not acceptable to the 'new business' of Emission Control.

is an experienced engineer. He demonstrates in the papers that the GhG Effect breaks the Second Law of Thermodynamics and basic molecular science. The GhG Effect is totally false.

is a committed conservationist who has fenced 30-40 kms of waterways with permanent fencing at his own cost, well before it became compulsory to do so. Farmers nurture their land and don't seek recognition. The relentless criticism of farmers as polluters, wreckers of soils and major emission producers is inaccurate and galling.

THE SCIENCE OF GREENHOUSE GASES IS INCORRECT A SCIENTIFIC ESSAY ON HOW GhG COOL THE PLANET, AND PERMIT LIFE ON EARTH

The mathematical calculation of the Greenhouse Gas (GhG) Effect is a huge scientific error, an error unrecognized by the Developed World's citizens. Governments are in-part responsible for the costly consequences because they didn't question the fundamental science. Governments have large scientific resources to check, but failed to do so. They need to check the information within this essay and acknowledge the life-giving role of GhG.

The error came in the 1990's from the misapplication of a simple scientific equation known as the Stefan-Boltzmann relationship. It states; the intensity of radiation emanating from a hot body in space (eg the Sun) is directly proportional to the fourth power of its absolute temperature. By application of thermodynamics, this can be extended to relate the average surface temperature of a warm body in space (eg planet Earth) to the average intensity of radiation that it is receiving (eg from the Sun). The lack of care in making that extension has led to the scientific miscalculation and huge consequences.

The 1990s calculation mislead scientists into thinking that the average level of radiation at the tropopause (Earth's outer atmosphere) from the Sun is 25% of the level that a satellite would measure at the same distance from the Sun. That factor should be 40.6% (being $4/\pi^2$ which gives a surface temperature of 14.5 deg C rounded to 15 deg.C). Most scientists could not recognize this error unless they have studied the Quantum Mechanical theory of light, and had a very good background in statistics.

Chemical engineers who have studied design procedures for furnaces and kilns, or had practical experience with solar power systems should detect the error, but only if they had higher statistical training too. The perpetrators of the error would have been pretty sure that they would escape detection for decades, when they launched their false science with its calculated surface temperature of -18°C, which required a 33°C 'GhG Effect' to reach Earth's measured temperature of 15°C.

Those scientists may not have understood then that global warming arises from solar variations and orbital interactions, not from human activity. They should have tried to understand the thermodynamics of greenhouse gases before labelling them the cause of global warming. Their carelessness is inexcusable. Mankind can now regain proper perspectives on GhG molecules.

The true science can be illustrated in either of two ways.

1,Take a snapshot of Earth, from say 20,000 km into space, so that the half that receives daylight along with its tiny 10-km blue "skin" of atmosphere around it can be easily seen. It is then necessary only to formulate from that one-second snapshot what the radiation level is that falls on each square metre of the sunlit half of the tropopause, then average it correctly, to obtain the average instantaneous intensity of the radiation striking the atmosphere. Although Earth rotates, and has a variable tilt, and both a variable eccentricity and a precessional wobble as it orbits, the size of that illuminated area will not change from second to second, because exactly half of the surface is always exposed in this approach.

Thus the central-most 1.00 metre square ray that falls on the tropopause surface, strikes it orthogonally (at right angles), so that it illuminates 1.00 square metres of surface. Other 1-m sq, parallel rays that strike points of longitude θ and latitude λ relative to that central ray will strike the surface at component angles of θ and λ , and so will illuminate a larger surface area of size: secant θ secant λ [m²] So, their 1-square-metre point-intensities will be: S_{149} cos θ cos λ [W/m²] where S_{149} equals 1365.2 [W/m²] is the solar intensity at Earth's distance of 149.6 million km from the Sun. When that double-cosine point-intensity is averaged over the whole sunlit hemisphere, where both

 θ and λ each range independently from $-\pi/2$ to $+\pi/2$ radians, an averaging factor of $2/\pi$ is obtained for each component. Hence the true average solar intensity reaching the atmosphere's outer surface is $2/\pi \cdot 2/\pi \cdot S_{149} = 0.406 \cdot S_{149} = 553.3$ [W/m²],

Scientists agree correctly, that 29.9% of this arriving radiation gets reflected back out into space by clouds and snow before it can affect Earth's temperature. So this proportion is subtracted, ie 165.4 [W/m²], to give 387.9 [W/m²] that reaches Earth's surface on average. So when that value is used in the Stefan-Boltzmann relationship, Earth's average surface temperature is found to be 14.5°C, (justifiably rounded to 15°C), which equals the measured value. This value makes the GhG effect zero. Therefore theories based on 'GhG Effects'; 'Global Warming', 'Emission Controls' and International Climate Accords have arisen from wrong science.

2, A second and more authentic way of calculating the average intensity received arises from the quantum theory of light. This involves calculating the orthogonal component of radiation when it strikes a surface and gives the same double-cosine relationship as related above. As an observational proof of this orthogonality factor, daytime production data from an off-grid solar power system near Goodiwindi are shown in Figure 1, during the summer solstice. Similar such data for July (not shown) give a smaller, narrower production curve, but still with a cosine fit. So this demonstrates that such solar systems exhibit the same double-cosine effect daily between sunrise and sunset, and seasonally between winter and summer. Note that this solar system generated only as much power as needed for the instantaneous applied load plus the battery recharge, plus the inefficiencies, so could not fill-up the cosine curve fully. But if it had been connected to the grid, and the grid could have used the extra power that was available, then it would have filled the cosine profile exactly.

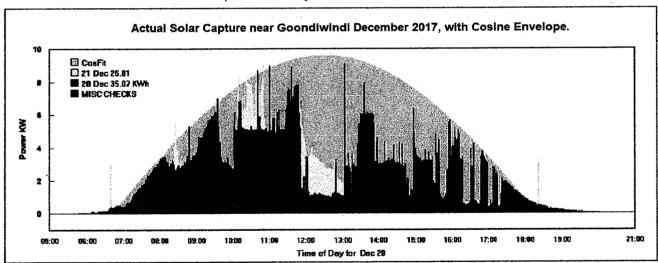


Figure 1: Actual Solar Power Generation Rates near Goodiwindi from different days in December 2017 over which an envelope can be drawn to confirm a cosine functionality vs time-of-day. The teal cosine background shows that it is effectively the orthogonal component that is providing the solar energy to the panels.

Unsurprisingly, the same logic applies in the chemical engineering design procedures for furnaces and for other radiative heat exchangers. so this quantum approach should not be regarded as a new phenomenon. It is just proper analysis.

As a final pointer, the flow of radiation from Earth's night-time hemisphere into the hemisphere of deep space at -270°C is fully orthogonal and so in using the emitting Stefan-Boltzmann relationship to calculate Earth's surface temperature, a value of 15°C is obtained again. Such consistency between the illuminated hemisphere and the night-time hemisphere is not produced by the erroneous 1990's calculation. The table that follows after the last paragraph, below, shows where the error arises.

This all means that the GhG effect is 0°C. Incorrect roles of CO2 and other GhGs,in raising Earth's surface temperature by 33°C, is **scientific fiction**. Earth does receive sufficient solar radiation directly to reach its average surface temperature exactly. There is a balance, an exchange from a hot body emitting heat towards a cold place. It does not require any imagined heat-trapping plus heat-transfer process to transfer the 33°C-worth of heat energy from the night-time escape path against an adverse temperature gradient back to the surface whence that heat came and breaking the second law of thermodynamics.

Trace compositions of GhG present, and their specific heats means their heat capacity within the atmosphere is calculated as **less than 1%** of the total heat capacity of the atmosphere. Therefore, GhG is incapable of storing sensible heat energy within the atmosphere and altering its overall temperature (certainly not by 33°C). Their only role being able to absorb that infrared (IR) radiation as the first step in **transmitting** it onwards to deep space.

This first step, is extremely important because in trying to understand the flow of solar energy on to Earth's surface. What mechanism enables Earth's surface to dissipate all of the daytime heat acquired so day-to-day temperature cycles remain stable? When the heat transport parameters for conduction are examined, the answer becomes obvious. The very low temperature gradient across the 10-km atmosphere, and very low thermal conductivity of air (a good insulator in winter clothing) and the very high heat transport rate required (of 388 [W/m²]) all combine to make night-time **conduction** balancing heat flows away from the surface, roughly six million times too low to be effective. Conduction is not the mechanism. Even forced convective heat transfer coefficients in gases are notoriously poor, so unforced **convection** cannot be considered as a tranfer mechanism either. For short spells in small localities, hurricanes might provide some such function.

GhG is the only consistent mechanism that drives outward night-time IR radiation heat flow from season to season and around the whole planet. In short, GhG act as agents for cooling Earth's surface.

Two well documented climate mysteries can also be solved with the GhG "cooling effect" science. First. The clear decline in temperatures that occurred towards the end of WW2 and through to the 1970's, times when wartime production and infrastructure re-construction increased enormously. The new revelations suggest that the large increases in GhG that were produced had an initial effect of increasing night-time heat flows to the extent that daytime maximum temperatures also fell, but as those gases dissolved into oceans, that cooling effect was reduced. The dissolved CO2 profile is slow to show any increase in CO2 content simply due to the immense size of the oceans. Time-constraints of around 20 years show large-scale changes.

Second mystery concerns Ice-age cycles. Research has shown rapid turnaround in temperature and GhG concentration profiles, at the start of the Interglacial periods. An explanation. The rapid decline in transport capability of the atmosphere when firstly humidity and then finally CO2 largely disappear from the atmosphere. There is no cooling escape-path for the daily heat load. Temperatures rise. Interglacial measurements show relatively rapid rises until sufficient snow has turned into water which evaporates forming humidity. So normal IR heat flows can resume at about today's levels.

The practical examples in the above paragraphs illustrate **GhG** role as cooling agents for Earth's surface. They cannot be blamed for causing Earth's temperature to rise. To blame Global Warming on CO2 is a fallacy that arose from within the erroneous science narrative when wishing to explain how Earth's surface temperature gets daily from -18 to +15°C. This essay explains that Earth's radiative temperature is 15°C already. Mankind is wasting resources in trying to reduce GhG emissions. New

Zealand and Australia should acknowledge politically the GhG erroneous science and debunk all associated myths. To do nothing is to have mankind spending billions on climate control and achieving nothing.

OCATION	SOLAR INTENSITY [Watt/sq.metre] & Temp [Deg.C]		PROCESS
	Accurate Maths	Erroneous Maths	
Sun's photosphere. at temp of . [deg.C]	63.0 million 5505	63.0 million 5 505	
			3-Dimensional radiation over distance of 149.6 million km
Outer tropopause	1365.2	1365.2	
	40.6%	25%	Geometrical Averaging factor to account for sphericity of Earth
Inner tropopause	553	341	
	-165 ——	-102	Reflections back to Space, 29.9% due to clouds, snow, ice
Earth's surface	388	239	Net Average
at temp of [deg.C]	15	-18	via Stefan-Boltzmann

Figure 2: Origin of the Fundamental Error in Calculating Earth's Radiative Temperature

Note: This "Kiwi" version of the Essay has been promoted by the writer's Best Man and is thus tailored for NZ farmers and NZ realists who can recognize when they're being duped by European and USA opportunists wanting to make a buck out of climate obscurity. Questions can be directed to, and a more detailed version obtained from, him at:

I submit we need to wgotly reduce our green house gas omissions. We need to repuse our finances in pacted by the need to move out of some inclustries. We can do his bb subsidising them into more evinomental work. Du coo'.d response shows where there is a will there is a way. De reed to act now not later or slowly. This is not only for us but for ow packe neighbours. Tit is time to act and live. differently. We can if we choose to.

Attn: Submissions Analysis Team Climate Change Commission PO Box 24448 Wellington 6142 #27

22

March 2021-03-21

One Big Thing

Dear Sir / Madam

I am disappointed in the Climate Change Commission Draft - in my opinion, it is not worded at all strongly enough, considering the urgency of the situation we face. Nor does it satisfactorily address environmental issues, being framed around economic sectors only.

Planting trees and caring for our environment is no longer enough to avoid the potential of catastrophic climate changes – severe emission cuts are also required. Worldwide, humans have both ignored, and dithered over, scientific advice for far too long.

It is recognised that we do not have the luxury of time which is why I was truly expecting a far stronger draft, including a 'roadmap' that states immediate actions necessary to begin to address issues, while longer term goals are defined.

A return to healthy ecosystems, with clean water and air, is the most fundamental and most pressing issue to address – otherwise the rest stands to become merely academic in face of climate change.

We need to truly value what sustains us.

Unfortunately, permanent indigenous forests are not the focus of this report. Forestry is.

Already, the Nelson / Tasman district is experiencing hotter and drier conditions, with the noticeable loss of many mature trees in places such as Kahurangi National Park. These trees perform vital ecological services that we can not afford to lose, and indeed should be adding to as fast as possible. Meeting biodiversity and ecological objectives and recognising the carbon sequestration services gained, I would expect to result in an expansion of those programmes already underway. We should recognise just how much permanent forest has been lost from New Zealand since the arrival of humans. There are many introduced mammalian and avian pests, plus weed issues, threatening permanent forests and

restoration efforts towards New Zealand's flora and fauna which also need to be addressed.

Our marine and fresh water environments - significant food sources - are similarly under threat from rising sea temperatures, sedimentation, acidification, and introduced species. The potential for 'blue carbon' sequestration in the marine environment is significant.

The public urgently needs clearly stated information and immediate clear and meaningful goals to aim for. The whole country needs to act together. This issue is not somewhere in the future – it is here and now. The planet needs us to stop talking and start doing!~





Jear Commissiones

Action to address climate change must work with other measures to address interrelated environmental, social and economic crises in an integrated way. Overall demand for energy and goods should be addressed, as well as ethical consideration of the value and use and purpose of the goods and services we produce

Yours faithfully,

To The Climate Change Commission

N.Z imported 1.1 million tons of Coal 2020 more than 2017/18 total,

I didn't see any greens protesting over this, N.Z could have used its own coal and gave N.Z workers more work Labour doe'sn't care about N.Z workers, they only care about obeying their U.N Masters and their Climate change religion.

Article on Pandemic linted to short spike in temperatures in the Eastern U.S. Russia and China of 0.3 to 0.37 of a degree warmer, due to being less soot and sulfate particles from car emmissions and burning coal, which normally cooksearth, also air had fewer cooling aerosols, soot and sulfate results in cooling. Scientists have long known this fact.

So best way to stop warming is to burn more coal, which the chines are doing, same as germany both use coal to generate power same as N-Z only other way in to go for nuclear Power

Agriculture was going to deemed a Non essential industristry at the start of lock down 4 last march by labour cabnet its the only industry that's paying the bills at the moment, there is that much verbal diarrhoea comeing out of the beenive its running down the streets of Wellington

N.Zs CO2 Readings went up over Covid 19 lock down 2020.

The I.P.P.C "consensus" atmospheric physics mode) tying Co2 to global warming is not only unverifiable but actually violates basic laws of physics i.e. the first and Second law of Thermodynamics 1 The mechanism of warming in a greenhouse With a solid glass roof is different from earths Atmosphere earths atmosphere is not solid like glass it is porus, at night temperatures can drop by as much as 17 degrees which happened dureing our hot summer, oneday it was 22 degrees in the day time and only 5 degrees at night due to low humidity in the air ie low moisture in atmosphere, Parths temperature Day 21 night 4 Maisture in the atmosphere traps 95% of heat trying to bounce back into space. A green house is a closed system Earths atmosphere is an open system Planting trees on existing grassland then claiming all of the COR credits that the trees absorb, without deducting the Coz that was absorbed by the grassland that was there before the trees where planted, is traud Grass can absorb 24 tons of CO2 per hectare per year trees might absorb 30 tous of CO2 per Hec per year difference shown on graph, Farmers could Claim all of their grass as CO2 credits 176 tons difference So as there is only an extra Trees 30 Tons the only amount of CO2 that can be claimed as a credit, to claim the full amount of 30 tons is troud as there is no longer any grass growing under the pine trees it you look under a plantation of trees.

To The Climate Change Commission

Re The E.T.S Scam claiming E.T.S will stop climate change etc. Floods Droughts, and Snow storms are still occurring was there global warming when the world ran on coal

Has the sea level rose by 12 mm in 2020 it will have to rise by this amount every year until the end of this century to be I metre above present level as predicted by our government.

How much Australian CO2 is present in CO2 readings per day taken at Baring Head this only measures CO2 emited by Wellington area, measurements should be taken from at least 100 different places to get accurated at a less reading from at shore west of N.Z of incomeing CO2, then on the east coast to measure outgoing CO2.

N.Z is Cog neutral because of all the green vegetation which eats Coz,

How does CO2 from another country get into N.Z trees when same trees are eating NZ CO2, I thought Claiming that N.Zs trees can absorb another Countrys CO2 when they don't is froud, your Commission is condoning Fraud

From

9 Volcanoes erupting 9 years of Human 20 40 erapting in land egainalent. maistair about grass can Photo-oxidise 100 Times More Chy than what is preduced DY 911959 Os and water Vapour atter methane breaks down into or an una 15 would be absorbed

16.3.21 9 Volcandes have a namber emissions per day cool earth down we

いのでのでのでいっている。

Trees destroy eriginal Classink, Trees are water hungary 135 LTES

First in Bule of relatively applies to every thing the Day Gradden C. au Charle 24 Town of Coa Par Heat are Yer year and People Can earn a Livelya of the

Pine Egrests Destroy Grassland CO2 sink stays. The Same as before pine trees were planted on grasslands.

necessary for food productio



mouths the food production system cannot cope without the

The global population. rocess, which is fundamental de precusor to the making of the production of ammonia

cod is both available and cheap vorid ателож оунгулдаг becaus rother parts of the world food white and malnourishment are Though some sectors of the

e equation and the problems l increase: lemove mirogen fertillser from

grazing system, the animal, But the would lan't perfect and some nitrogen has the potential to leak from the production system into up by the plant and then, in a Treperfect world all the perfect world all the

> wetsolls, whether the nitrogen has uring or released from clover. been applied in fertiliser, animal conditions are right, generally in

Ruakura showed leaching from by source—clover pasture or grass 146kg nitrogen/halls not affected Research in the 1990s at

of the applied fertiliser is taken of application, grazing management and improved production so more but so does timing of fentiliser and culverts all play a part Feaces, riparian planting, bridges in the product to manage their nitrogen loss. iechnology have enabled farmers Advances in science and

said "Water quality in most rivers Is now considerably better than It Last year NIWAs Jung magazine

es hirrogen (as rifrete) and n factor concerniation of nutrients such ishing in the would rivers with some of the best coarse such as Irsiand. And Itsland has deteriorating. The data show This April the LAYA: 2018 eport showed New Zegland has nose waterways improving than 10 lower char civers in other

be cause for celebration – the minking job done but it should mean that anybody should be in retention of nutrients does not Having achieved positive trends

> DairyNZ and Federated Farmers course, praise encourages people estimate over \$1 billion. And, of money has been considerable. investment in terms of time and

is applied inst**e**ad offermyard found to decrease when thea be based on research last century matter. The concern appears to soil quality particularly organic manure, Of course. where soil organic matter was respect to nitrogen. It is also that people worry about with However, it isn't only waterways

carbon input rather than the input a new equilibulum. It is the lack o a new diet and will consume the micro-organisms have to adjust to soil organic matter as they reach excreta containing nitrogen and has ultrogen. That means the soil from bedding as well as all the ionalderable carbon in it eut seangaitein deim se negonie hosphorus from animais. Urea harm yard manure has

ground and the micro-organisms to grow without grazing them. As the plants die they will fall to the by overcoming any nirrogen limitation their allow the plants increase soll organic matter is to has shown the gaglest way to refired from Massey University stimulate photosynthesis in plant Professor Tony Parsons, recently

is what the world lood for humans

affluence and ag country of birth about that is ntiuenced by probably a marter flow one feels mean a reduction no garyler mo perspective. атизе соща Not using

them doing so and so does the on trying to fine scientists will go or the challenge

grow and die. The less easy parts dioxide and nitrogen as they to digest will build up as organic will digest them, releasing carbon

But it doesn't create food for rumans, And That is how mulching works

> soil science and has been analysing the interaction between agriculture. Dr. Jecqueline Rowerth has a PhD the environment and society for

the population in try to stabilise needs while we

steering you towards zero nitrogen use. Nitrogen fixation by legumes are released into the soil for plants to capture. out to 400kg of N/ha. One billion bacteria per teaspoon are equivalent of healthy soil. These creatures have a C.N ratio of 5:1. That can work is only part of the equation. There are one billion bacteria in a teaspoor to 5 cows/ha. Protozoa have a C:N ratio 30:1. They eat 10,000 bacteria Nematodes are 100:1, so for every 20 bacteria they dine on, 19 parts of N per day. For every 6 bacteria they ingest, they release 5 parts of N. We can increase the quality and quantity of your pasture while

and what will the public - the about this very important issue to help non-scientists understand usefully contribute to the debate who to believe? What can I layman – make of this war of words? How can the public decide observer. What are others saying TR GD TIBBETT WATER OF THE

Healthy Rivers plan, Pukekohe, called to discuss the armers meeting on October 8 in The first shots were fired at a

also to phosphorous and e-coli. the world, adding that this applies the Waikato are considerably comment that the nitrate levels in from the OECD, made the ower than many other rivers in f Walkato University, citing data Professor Jacqueline Rowarth

Massey University said Rowarth's ecologist, said Rowarth was that they do need to be called on "almost twisting the science" and "when people are saying stuff like t". Professor Russell Death from et and self-described agro-Alison Dewes, a Walkato based

OECD data say? A good summary comes from the Morgan Foundation; "The OECD data is relatively low levels of total three New Zealand rivers covered assertions were wrong. I was curious. What does the have very low levels of nitrate and (Waiksto, Waitaki and Clutha) interesting in that it shows the phosphorous, compared to major

> of the 98 rivers reported on. The second-lowest nitrate levels of any

Waikato has the fourth-lowest

evel of nitrates,"

rivers in other developed countries. Indeed the Waitaki and

Clutha rivers have the lowest and

OECD figures show that the Walkato River has the fourth-lowest level of ritrates of 98 rivers reported on in developed

E coll readings at regional rivers

with him to ensure reporting was would have enabled me to work In context and reflected my words clean (October 10). This was changed my statements, but Acknowledgement wouldn't have written by a journalist who did not declare his intention when I asked if any media were present.

Escherichia coil (part of swimability), the Walkato Regional directive states that 1000cfu/100m of 550. In some contrast, the EU per 100 millilitres and a maximum <126 colony forming units (cfu) Council is aiming for a median of Walkato above, in terms of the nutrient content of the Dr Doug Edmeades discusses

> outbreaks are recorded). council website, the highest E coi swimming (and no gastric recording for the Walkato River is 120 at Huntly. The Walpa River is According to the regional

young solls and original bush causes or sediment overall are cropping. However, the main are forastry, construction and main current sources of sediment the Environment states that the Parliamentary Commissioner for Science behind Water Quality, the the Walkato is sediment, in The What does limit swimability in

Waikato River showed some the quality indicators in the meeting that the trends in some of Rowarth also commented at the

water quality parameters at 10 Improvement. This is also correct, but needs measures on a monthly basis 11 some context. The regional council sites down the river. Taking a

Given that Rowarth faithfully reflected the OEOD data, why the outcry? Why the nastiness?

95th percentile) is good quality for dearance by various human

320 at Whatawhata. If the council used the same pass mark as the EU the grade would be "excellent".

Professor of Agribusiness University of Walkato

arrivais.

in organic matter. of irrigation and fartiliser to allow willows and, in some areas, the use improved pastures and an increas are smaller now than they were, work of the previous catchment from the 1940s indicates that the reflecting planting of poplars and boards has had an effect - areas from Landcare Research with thos Comparison of erosion maps

general in order to get the facts contacted by media and society in i am always happy to be

context the river is in good shape but in the context of the Waikato N). Thus within the international recent report covering the period 2008 to 2012, shows improvement in some indicators (ammonia N, others (turbidity, clarity and total and E coli) and deterioration in total P, BOD, arsenic, chlorophyli very broad perspective, their most

Jacqueline Rowarth

catchment of the upper Waikato of farmers (22) in a small sub-

Which is which? You decide. Broker and the Issue Advocate

an independent soil scientist. He is doug.edmeades@agknowhappy to hear from readers: Dr Doug Edmeades, MNZM, is

hence value, living here consumptive value of which because.... amenities were a part (I like, and

way in a general report. That is why it was not factored into his not be included in any meaningfull) site and person specific it could consumptive value of land was so opp He noted that because the

own research showing that guess that she is referring to her contact her failed so I can only being selective – ignoring some studies. My various attempts to reducing stocking rates can reduc 😅 Atrate leaching and imultaneously increase profits, Dawes criticised Journaux for

Her study was limited to a subset would increase. reduced. Both the productive ralue and the amenity value because inputs costs could be But context is important here.

region. Extrapolating this across the region is, I suggest, risky.
So I will sign off leaving you some homework. In my last science types: the Pure Scientist column I introduced you to four the Science Arbiter, the Honest

edge.co.nz

lay vital environmental role

The authors also point out that for much of the world, crops are not an option because of various resource factors such as rainfall and temperature. For NZ, topography rules out cultivation for crops. Instead, grazing animals turn pasture into humanedible protein and sus-

tainable fibre. In the case of the deer industry, there are also products such as velvet which has health attributes.

The other main ruminants in NZ are the dairy animals, which occupy 1:7m ha. Removing dairy animals would also remove a considerable proportion of the

export economy and the associated jobs. Of more importance in the environmental consideration would be the alternative use for the land.

Cropping is an obvious suggestion, particularly advocated by people who are vegan (reject all animal products) but overlooks the fact that (a) NZ is not generally competitive in protein crops (leatils and chick-peas, for instance) and (b) that cropping drives; up greenhouse gas fuel consumption and chemical use and increases the potential for erosion.

On the Camerbury Plains, once the main area for the cropping industry, the increase in dairying has also been associated with increase in soil organic matter (and hence ecosystem functioning); the visual clue is in the decrease in dust-storms. Native plantings supported by the increased irrigation on the plains has

TODACE 22 W

Supported broken; say that widdlife habitate.

Plantings have been stringer, comes for defining strings of the strings and coverall, a brillion dollars of spent challed by high broken are tracked contribution.

Brokers of the broken of DP.

Glean, green NA's a post for all forms and no be achieved without a passocial reminiment that have a black post of the rest to built in NA's alrest in the spine

Ocquerine statem in Schild Configuration of the Environmental Engage Section (except section of the Environmental Engage Section (except section of the Environmental Engage Section (except section of the Environmental Environme

Methane gas not a major problem

Otto Muller

shortly. One of the main items is the major polluter in our atmosphere. What are the scientific facts?

In the year 2000 emissions from the industrial sector, including transport amounted to 31.1 million tonnes of CO2. Emissions from the agricultural sector amounted to 1.416 million tonnes of methane with a CO2 equivalent of 29.7m tonnes as well as 39000t of nitrous oxide.

There is a major difference between these two gases. CO2 from industry and transport is a cumulative emission which means that say over a period of 100 years the amount of CO2 in the atmosphere by the sum of 100 years emissions.

In contrast, methane has a life in the atmosphere of only 10 years. It is obvious that the following facts:

1 With a 10-year life cycle there will never be more than the last 10 years emission in the atmosphere.

2 Every year 10% of the methane in the atmosphere breaks down into CO2. The 1.416 million tonnes oxidises into 3.93m tonnes of CO2.

There were at the turn of the century some 1.5 billion tonnes of CO2 in the atmosphere from the burning of fossil fuel by the industry, railways and road transport. There would have been some 14 million tonnes of methane in the atmosphere from our livestock industry.

If the present day emissions continued at the present level, for 100 years, industrial emissions would result in an increase of 3.11 billion tonnes of CO2. However, there would be no increase in the level

of methane, since methane emissions are balanced by methane breakdown into CO2. The CO2 resulting from the breakdown of methane represents 2.6% of the CO2 absorbed by photosynthesis in our pastures to produce the feed for our livestock.

It is rather obvious that these important facts have not been considered when our policy on the Kyoto Protocol was decided.

With this we are accepting the notion that the methane is our major polluting gas which is not conect. It may very well result in some future date that we shall have to spend billions of dollars to buy carbon credits from other countries for having conceded something we did not do.

Our people have been subjected to a campaign, representing our ruminant animals as the main source of increasing Greenhouse gases in the atmosphere. This I presume was the politically correct version. I think it is time that our people hear the scientifically correct version of the situation.

Incidentally this is not at a PhD level of science. It is sixth form level. Talking to a science teacher I was told that if sixth formers were given the basic information, the majority of them would be able to figure out that under the existing circumstances, the methane emissions would not increase the methane level in the atmosphere.

 Otto Muller (Cromwell) is originally from Switzerland where he was an engineer in thermal power generation and involved in technology and microbiology research for the dairy industry.

lay vital environmental role

The authors also point out that for much of the world, crops are not an option because of various resource factors such as rainfall and temperature. For NZ, topography rules out cultivation for crops. Instead, grazing animals turn pasture into humanedible protein and sus-

tainable fibre. In the case of the deer industry, there are also products such as velvet which has health attributes.

The other main ruminants in NZ are the dairy animals, which occupy 1.7m ha. Removing dairy animals would also remove a considerable proportion of the export economy and the associated jobs. Of more importance in the environmental consideration would be the alternative use for the land.

Cropping is an obvious suggestion, particularly advocated by people who are vegan (reject all animal products) but overlooks the fact that (a) NZ is not generally competitive in protein crops (lentils and chick-pess, for instance) and (b) that cropping drives up greenhouse gas fuel consumption and chemical use and increases the potential for erosion.

On the Canterbury Plains; cace the main area for the cropping industry, the increase in dairying has also been associated with increase in still organic matter (and hence ecosystem functioning); the visual chie is in the decrease in dust-storms. Native plantings supported by the increased irrigation on the plants has

TO PAGE 32 X)

namentario in inversity and within habitat

Phoeting brog bone, a minute first to a strong driver with visitions of a vects, with visitions of avect projects, we had a stablishments, tipo planting and overall a follow dollars of spendentality by indicting a travelled a community of the strong state and a community of the strong state and a community of the strong state and a st

Chan, great Nas a post for all, our stall to be achieved without equation amount of days like and to have a successification. With almost of the game

This is a supplied to the supplied of the supplined of the supplied of the supplied of the supplied of the suppli

ater blamed as big planet warme

> NEIL KEATING neilla Drurainews, co.nz

contributors to any global and nitrous oxide - New 70% of the 'greenhouse "virtually irrelevant" as responsible for at least effect, while methane nasty' emissions - are Zealand's supposedly WATER VAPOUR is warming effect.

So say two scientists, talding on climate change They are former MAP a New Zealander and an the tack most politicians American, authors of a paper highly critical of and many others are

Allison and Dr Thomas P. Sheahen, chairman of the Science and Environmental Policy Project, based senior scientist Dr Jock

William van Wijngarden, were: Will Happer, a proa professor of physics at research (especially of atmospheric physics) Informing their In Virginia, USA.

clouds are responsible for 80-90% or more of the "Water vapour and

Table 1: Atmospheric parameters of GHGs eton University, USA, and fessor of physics at Princ-York University, Canada.

NITROUS OXIDE

METHAN

WATER

on readings 10 years ago

Dased

Jy/qdd 8'C 322 ppb The amount of water vapor in the air varies according to temperature and density of air (Laucaly ~1-3% of troposphare † Water vapor levels vary strongly according to region, so rates of change and warming potential cannot be assessed 1797 ppb ¥ 12 or less is [human caused] in comparison with meth-Z ane, about 40% of which Variable 5-200 yr. 1.5 pom/yr 385 ppm Very short 1-5 days "Increasing the concentration of carbon dloxide in the atmosphere is not such a 0.01-4% NA Global Warming Potential (GWP) Atmospheric concentration "Carbon dioxide has a finite influence and is in Atmospheric lifetime

GHG (greenhouse/warming gas) effect," say Allion and Sheahen.

sphere would most likely act the gas of life. Doubling the level of carbon increase in plant growth, a terrific boon to food result in about a 30% floxdde in the atmoproduction.

potential warming probby governments and the em for the world, as is requently promoted in the scientific literature, media.

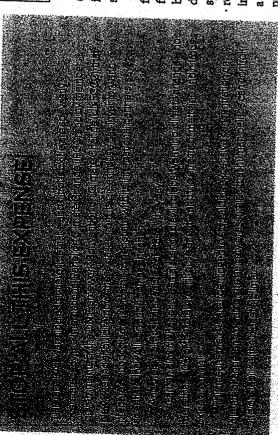
atmosphere each year, 5% "And of all the carbon dioxide going into the

is from natural sources; and similarly, estimates nitrous oxide are about of naturally occurring 60%

nitrous oxide (reckoned about 50% of total New Zealand emissions) that effects of methane and "So trivial are the

the "quantitative role" of their effects as infraredmust be "seriously quesabsorbing GHGs (greenhouse/warming gases) Honed", as also should carbon dioxide,

lished in the Institute of hen's paper will be pub-Primary Industry Man-Allison's and Shea-* agement Journal later this month,



Global warmers claim that the globe is warming. This implies some global temperature rounded figure that can be compared to a previous one. Temperature itself is not well understood. For example, which comes first, colder air falling or warmer air rising? Is one a stronger force, the real force or is one defined in relation to or in lack of, the other? Temperatures have no intrinsic meaning but are established by context. Air temperature used in climate measurement is derived using instrument-proxies such as length, volume, electrical conductance etc or natural proxies such as tree ring widths and wood density, ice core layer isotope rations etc. It is never measured using a thernodynamic definition. Any sensation of heating or warming is not a consequence of temperature but depends on the thermodynamic forces set up by the intensities in our bodies and our surroundings. That is why two people can disagree on whether a room is cold or hot. So, equally then, can two countries, because the internal criteria differ and one country's temperature is not defined in terms of the temperature of the other, but by its own sampling and sampling standards. Several countries, especially in different seasons, cannot sensibly compare anything to do

with temperatures. Averages are not temperatures and cannot be global either. You can liken it to a country's exchange rate which is peculiar to the country's monetary patterns and history. You may compare an exchange rate to another but there is no global exchange rate, and any exercise in calculation about exchange rate always serves the peculiarities of a transaction in just one country. A global exchange rate would mean nothing to everyone. Averages have nothing to do with physics. They are symbol numbers to represent many others in a list. They suggest a summing process leading to agreed normalisation and a departure from an arbitrarily decided line, this line set by the whole list. But sums are not always meaningful over all variables and the flaw in taking averages is that many averages are possible within just one set of any data, and whilst there may be a fictitious temperature average, there is no average temperature. For example in a named room the average height. weight and perhaps net income of males may be 1.5m, 100kg and \$50,000 per yr. But there may be, in the list of subjects the averages were derived from, no actual individual who is in real life all of the three. Also, all three variables may fluctuate over the course of any day or year, making the assessment even more meaningless. Temperature is about a trend and a gradient, not a fixed statement about unvarying thermodynamic energy. A room may be warming and cooling simultaneously, because the air nearest the window may be cooling in convective response to a changing outside temperature, whilst in the same room the air closest to a heat source like a stove or person may be warming, in the same way as an iced drink and a hot coffee on the same table will not for long retain their original temperature values. Whilst the individual temperature dynamics are still adjusting to each other, there is no way to express the room as a single temperature number. And constant readjustment is what temperature measures, the changes being within the hour, when the sun appears or sets, between day and night and seasons. The operator has a bias too, because younger people usually have better resistance to cold, also people of all ages and genders who are carrying more body weight. Taking time, operator and geographic biases(proximity to coast or inland, elevation and latitude) into account doesn't leave much left as raw reliable data. Whether the Earth is warmer or cooler than it was one hundred years ago, or whether one century is hotter than another century is problematic. Observations of temperatures on Earth can only be made at specific locations and at specific times. None reliably exist before human settlement in an area.

It would be nice if AGW theory were a scientific debate. Debate being the keyword because it implies doubt. Unfortunately AGW ceased to be a scientific debate decades ago. Those of us engaged on the political side of all this have always hoped that science and scientists would play the honest broker. That has clearly not taken place. There are some facts which cannot be disputed at this point; some of the basic science behind AGW theory does not meet accepted scientific standards, scientists conspired over a lenghty period of time to corrupt the peer-review process in their discipline, scientists conspired to keep their research and methodologies secret, and the IPCC made specific claims based on non-scientific articles from environmental advocacy groups. These are proven facts and constitute a bill of particulars which should cause any sincere person to have scrious doubts about the science behind AGW, the ability of the scientific community to maintain it's own standards, and the efficacy of any course of action built on AGW theory. climategate represents another failure of science and politics in a long history of such failures. The ambition of it's grand illusions are what set it a little apart from most others.

Be Wilding Pine debacle, cutting down wilding Pines Which absorb Coz, and then planting other pine trees to absorb Coz is totaly irrational, if managed properly wildings would be a good source of Firewood for heating and Chip exports, may be good for paper products and low grade timber use N.Z is importing Coal because it has not stockpiled enough coal for the coal fired power stations it our lakes get low on voter, I see greenpeace is tunning around in the rainbow warrior ship telling people how they hate oil, yet they use oil to power the boat and their rubber dinghys bunch of hypocrates, oil saved whales from extinction in mid 1800 Cheap way to remove coa from Atmosphere and kill 100% of people on earth grow energy crops to absorb Con then burn it to produce electricity using 40% of global crop land.
1988 scientists said the Maldives would be underwa in 30 years fast foreword to 2018 Maldives have gained land

Reinventing New Zealand?

New Zealand 1970 "CAN DO"

Think big

Development

Average wage \$5,000

Average house price \$8,600

5 people per small house

Low debt, two thirds GDP (public plus private)

(2.5 times GDP at end of WW2)

Saved money

Farming highly regarded

Growth culture

NZ owned land, forests, railways

BNZ, dairy processing, energy,

Positive productivity

Target of self sufficiency

Common sense politics

NEW ZEALAND 2020 "CAN'T DO"

Think small

High cost regulations, Environment Court

Average wage \$52,000

Average house price \$639,000, debt slaves

2.8 people per big house

High debt, twice GDP

Borrow money

Farming denigrated

Entitlement culture

Family silver mostly sold to foreigners

What's left to sell?

Negative productivity

Target of dependency

Lobby group politics

With the odd exception, New Zealand is now led by people who have never been hungry, never fought in a war, and never run a business. Will we have the discipline, as our forefathers did, to rebuild at an affordable cost?

Reality check

The current government is engaged in granting an extra holiday, and five more days of sick leave. "Let's stop moving"... Meanwhile, new immigrants are fast taking over ownership of the best cashflow businesses, because they work hard, and avoid employment and overtime costs by working within the family. Politicians pander to the bottom 20% of society while imposing more and more cost on businesses. How is New Zealand going to compete on the world stage?

A people feedlot



Just like animal feedlots, the feed is trucked in and the waste piped out. New Zealand earns its living from the land, not from the cities.

Written by Derek Daniell, farmer in the Wairarapa. "It's a huge worry to witness the kneejerk, political response to the Paris Accord... blame the animals? There is so much muddled thinking for the short term, not for a sustainable New Zealand."

derek@wairererams.co.nz

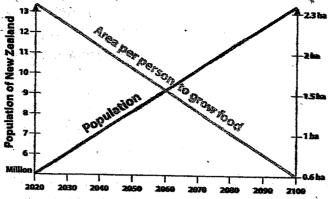
Feel free to download and share this document from www.wairererams.co.nz

NZ's productivity crisis

- The internal cost structure to build houses and roads is well above what our export sector can afford.
- Endless environmental reports. What % of NZ's 94,000km of roads are an "environmental disaster"?
- 15 years to action an irrigation scheme while costs double and triple.
- Every extra bureaucrat has to justify his/her existence. The regulators are breeding.
- Symbolic gesture: banning exploration for oil and gas will lead to more imported energy.
- Economy held together by productivity increase in the agricultural sector.
- You will pay indirectly for the carbon credits paid to rich
 people who plant trees. One estimate is \$7,000 per houshold.

Solutions

- The planet is overstocked with people, the root of all our problems? Cap New Zealand's population at 5 million.
- New Zealand's Paris Accord targets: remove ruminant emissions. Remove the government guarantee of carbon credit payments for planting trees.
- Continue oil and gas exploration, target self-sufficiency.
- Impose a significant entry charge on tourists. Increase foreign visitor charges for all tax payer created facilities, e.g. Aotearoa trail. It works in Bhutan.
- New Zealand agriculture is more regenerative of soil fertility than most countries in the world. Don't handicap food production with stupid regulations.



As NZ population grows to 13 million by 2100, the area per person available for growing food shrinks from 2.3 hectares per person to 0.6 hectares. Assumes that 3 million hectares is planted in trees, or urban sprawl, or lifestyle blocks.

The ETA is an earnest attempt to align New Zealand's GHG emissions with the Paris Accord. But subsidising tree growing is not changing behaviour around the use of fossil fuels. Consider the actions of much richer countries: Norway has not stopped exploration for oil and gas; Singapore has not reduced air traffic through Changi airport, or shipping through its port.

New Zealand is naive to think that it can be a world leader in reducing manmade climate change. Shooting yourself in the foot hurts.

Trees are good?

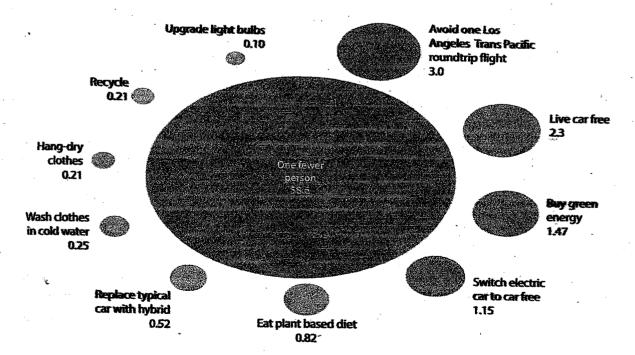
A thirty year crop is a big risk. Log values over the past thirty years have been low more often than high. Eighty percent of our export logs currently go to China, where almost all of them are milled for boxing around concrete, used, then burnt. So much for capturing carbon, it's a farce!

Is logging sustainable seventeen times in five hundred years? Pine trees have damaging effects on soils, streams, aquatic life, and inshore fisheries, and logging trash ruins beaches. It is a very expensive process to reinstate food production on logged over areas.



You can't eat wood.

What are the most effective steps that the New Zealand Government can take to tackle climate change?



The New Zealand government speaks with a forked tongue. It has no population policy, with a 46% increase in people since 1990. And current policy promotes long distance tourism for visitors and New Zealanders. Planting trees to offset our extravagant lifestyle is a short term band aid.

New Zealand has clean water

Google lists New Zealand as one of seven nations with the cleanest water in the world. What's the prize for being cleaner than that? There is an annual swimming race in the Waikato river through Hamilton, though the race stops short of the sewer outlet. Auckland beaches are swimmable some of the time. How many rivers in New Zealand are not swimmable? There are problems with E. coli sometimes, but that is usually because of birds.



Ten thousand flamingos ... a beautiful sight, but you wouldn't want to swim there.

Double standards apply: cities escape severe fines for breaches of sewage and stormwater regulations, but food producers get hammered.



Rivers aren't fenced in Africa

Another contradiction in the official line is "that sediment is bad".

But where did human civilisations set up? Today there is huge angst in Vietnam about the Chinese building more dams on the headwaters of the Mekong river, because the annual floods bring new soil to farmers in Vietnam, renewed fertility.

Nutrient: there is huge pressure to keep animals out of waterways here, yet the same people enjoy watching large animals in Africa playing in rivers and lakes. Three tonne hippos live in the water. Strangely enough, Africa has 22 times the number of freshwater fish species than New Zealand, 1,279 versus 58. Nutrient feeds life. Other countries fly fertiliser onto lakes to feed plant life to grow bigger fish.



- Do "greenies" understand the big picture? Big animals live in African rivers and there are 1279 species of freshwater fish, compared to 58 in New Zealand's barren rivers, where the water is too clean.
- Native fish in New Zealand thrive in unfenced pools in well developed farmland, where "piranha like" brown trout are not present, and more nutrients are in the water (PhD research paper).
- And Australian police have detained more than two hundred people who have deliberately lit fires... but global warming gets blamed.

Biodiversity

New Zealand always had poor biodiversity.

Africa New Zealand Species of 1,150 2 mammal Species of snake 68 0 Species of fish 1,279 58	Species of bird	430	196 (but 48 n during Maori	ow extinct, 32 civilisation)
Species of 1,150 2 mammal	The same of the sa	and the second state of the	0 58	
	mammal	1,150	2	

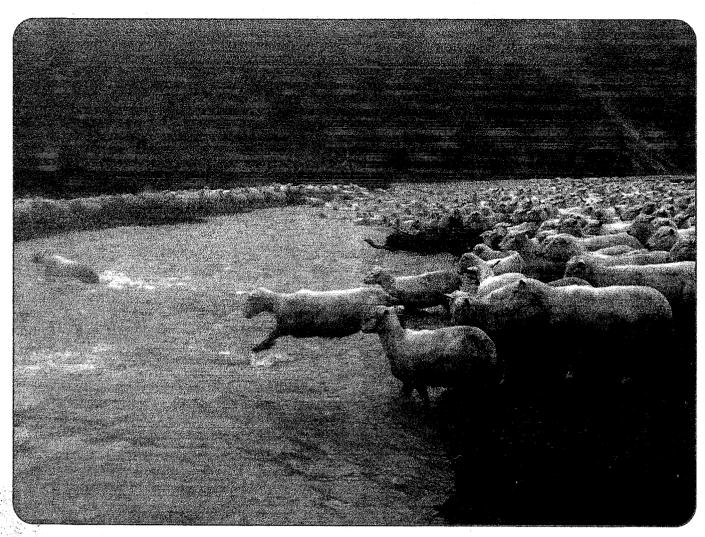
At their peak, livestock were grazed over 60% of New Zealand's land area. That's down to 37% now. Large areas have reverted to scrub and native bush, and many hectares have been retired by DOC or donated by food producers as QE2 covenants. Some species of native birds have grown in numbers, and some species have self introduced.

Why taxing methane is theft

- It is unjust. It fails to recognise the natural carbon cycle.
- It is unscientific. The method of assessing the levels of methane from ruminants is flawed.
- It is unfair. The assumptions are based on figures that are officially + or - 50%.
- It is unlawful. The Paris Agreement said to exclude food production.
- It is economic madness. Why leg-rope the sector leading the recovery?

The Paris Accord has a goal of stabilising GHG emissions in a way that does not reduce food production. New Zealand agriculture has complied with those requirements since 1990. New Zealand is squandering its land resource, with no planning around food security for a population which is increasing by two percent per year.

Sink or swim?



Where is the New Zealand economy headed?

Over the past few years food producers in New Zealand have been subjected to a relentless smear campaign by lobby groups, media and the government.

The general public has been brainwashed to think that our food production needs radical change. This Blame Game has focused on GHG emissions, water quality, and biodiversity. It's time to put the record straight.

Land use in New Zealand

Food production area has been shrinking for decades.

New Zealand's land area	
Urban and lifestyle blocks 6%	
Dairying 7%	
Sheep and beef farming 30%	
Horticulture 2%	
Plantation forestry 7%	
DOC estate, natural cover 48%	

Over half of this country is in trees, mountains, natural cover. ALL farming is 39% of total land area. A projection of current trends is shown in the graph on page 3.

How is New Zealand going to earn a high standard of living? What happened to "the Switzerland of the Pacific"? Is Auckland really the powerhouse of the economy? How would Auckland get on as a separate nation like Singapore?

Contradictions, double standards, symbolic gestures

"The Environment" has become a religion for some people. Lobby groups get their funding by creating anxiety. The Green Party gets most of its votes from wealthy electorates, so the rich, who tend to have the most GHG emissions from driving and flying, can appease their consciences.

Respectfully submitted by

My submission is in relation to transport, as mentioned in the climate Change Commissions' report.

Hoving worked for N.Z. Railways, (later the N.Z.
Railways Corporation), between 1972 and 1989,
as an Enginedriver, based in Christchurch and
still retaining a strong interest in Railways,
X would like to suggest the following;

Extending the Electrification of the North Island
Main Trunk Railway from Hamilton to Auckland,
the Southern most limit in Auckland currently
planned being Pukekohe.

This would allow a through electrified link for freight traffic between Palmerston North and Duckland.

It could also encourage a regular commuter passenger service between Hamilton and Auckland utilizing the existing fleet of Electric Multiple units.

A daily commuter service between these two main centres, could help reduce traffic flows on Audlands' Southern Motorway Natwork.

Electrification of the Bay of Planty Railway Line, between Hamilton and Tauranga This would recognize the importance of Tauranga as the second most utilized sea-port for exports and imports.

From memory and possibly documented in publications the Kaimai Tunnel, was designed and built with dimensions permitting Electrification at a future date, after it's opening in 1978. Extension of Wellington's Electrified Commuter Rail Metwork from Upper Hutt to Masterton. There are already soveral passenger trains, (Diesel hauled), operating between wellington and Masterton daily. An extension of the existing Electrified Commuter Train Network, utilising the present fleet of wallington's Electric Multiple units into the waircrapa region, would encourage more commuters onto Tail and reduce the need and use of the Rimutaka Hill Road (S.H.2.), which can be closed temporarily in the winter months, by high winds and snow. Extension of the Electrified Commuter network, would also acknowledge the fact, that the Wairarapa Ragion is growing in popularity with property owners wanting to avoid the main centres, where real-estate prices are increasing so rapidly. The present Labour Government (elected in 2020), is in a unique position, with its absolute majority. It's commitment to addressing Climate Change issues, can be planned for and enshrined in Legislation, with a degree of assurance. The previous National Government, (2008-2017), was proposing to De-Commission and De-Construct the electrified North I sland Main Trunk Railway,

between Palmerston North and Hamilton.

It also proposed to scrap the present fleet of Class 30 Electric Locomotives, which entered service in 1988 and replace them with new Diesel-Electrics. This move would have been inconsistent with the then National Government's support for and signing up to the Paris Climate Change Accord. Over the last 70 years, hundreds of Kilometres of Railways, especially branch lines, have been closed. The basic Railway Network as it exists in 2021, must be kept intact and enhanced, recognizing the importance of Roil as an integral part of N.Z's internal transport infrastructure. If this requires upgrades of routes as the North Auckland Line has been recently, or the purchase of new locomotives, both Electric and Diesel-Electric, the funding should be by Central Government and not through Kiwi-Reil's operating budget: Recognizing the fact that the remaining 16 North Tsland Electric Locomotives (class) 30), are now over 30 years old, planning for new replacements should be given priority. The original proposals for Electrification of the North Island Main Mrunk Railway, envisioned Locomotives of around 5-6,000 B.H.P each, whereas when the Class 30's were constructed, it is understood that the maximum B.H.P per I ocomotive is around 3,500-4,000 each. The South Island Railway Network, is wholly operated with Diesel-Electrics, which were in existence when I was an Enginedriver 32 years ago. The majority of this fleat of Locomotives are long overdue for replacement with new feel efficient units.

Earlier in my submission, I made mention of the need to retain and enhance the Existing Railway. Network. There is however one route which might be under threat, unless more freight is generated. This is the South Islands Midland Line, between Rolleston and Stillwater Junction and its cornecting 1.nks to Hokitika, Rapahoe and Ngakawau. When the export coal traffic from the west Coast finally crosses, in accordance with the present Government's commitment to reduce the reliance, import and export of Fossil Fuels, will the Midland Line remain financially viable. Other than the coal traffic coming out of Rapahoe and Ngakaway, the only other traffic at present are the Dairy Products from Hokitika, the occasional log train and the daily return Trans-Alpine passenger service. To lose the Midland Rail link would be a tragedy with the scenery considered Internation--ally as world Class Although the total population of the entire west Coast is under 50,000, surely Kiwi Rail and the Government could work together to find and generate more freight traffic to ensure the Midland hines long term future. My apologies for presenting a written submission, but being in the older age group, I am not computer literate or have access to one.

SUBMISSION ON THE 2021 DRAFT OF ADVICE FOR **CONSULTATION**

(BUT REFERENCED TO THE "DRAFT SUPPORTING **EVIDENCE FOR COSULTATION")**

Submittor, B.E. (Auckland)

Framework for the Commission's report

The Climate Change Response Act clearly states in Section 5Z the way that emissions budgets are to be set to meet New Zealand's obligations under the Paris Accord. The budgets to be set relate to New Zealand's emissions only, presumably on the basis that if all signatories to the Accord achieve their targets world emissions targets will be met.

Note that this basis does not prevent reduction in emissions in New Zealand by moving high emissions industries out of New Zealand to achieve the budgets. As an example the closure of the Cement works at Westport for economic reasons reduced New Zealand's CO₂ emissions by 400,000 tonnes per annum (but did not reduce world emissions as New Zealand then imported this cement from other countries increasing their CO₂ emissions)

Section 5ZA of the Act provides for the Commission to advise the Minister on several matters relevant to setting an emissions budget and Section 5ZC sets out the "Matters relevant to advising on, and setting, emissions budgets". Under Section 5ZC.2.b the Commission must have regard to a number of matters.

1. <u>Shortfalls in the Commission's considerations of the</u> matters set out in Section 5ZC.2.b

The Commission's Report does not adequately have regard to at least two of the matters listed in 5ZC.2.b and this submission will relate to these two shortfalls and the consequent Approach and Direction of Policy for New Zealand

2.a. Shortfall in advice on 5ZC.2.b.(x), responses to climate change taken or planned by parties to the Paris Agreement or the Convention

The Climate Change Response Act sets targets for the reductions of emissions in New Zealand in accordance with its obligations under the Paris Accord and Convention. By placing the responsibility for meeting these obligations on individual countries, the presumption must be that if all or enough countries comply that the overall global emissions targets will be met.

Even if these targets are met, there will be effects on the New Zealand economy. For instance the dramatic cuts in the demand for fossil fuels will see a dramatic cut

in their costs. This point was demonstrated during the initial Covid 19 lockdowns when the prices for WTI crude oil fell from over USD60 to under USD20(1). Any such changes have to be taken into consideration when assessing competitiveness of various options, foreign exchange requirements, subsidies and tax on the economy.

On the positive side, if there was complete confidence that the targets would be met, New Zealand could take the risk of not putting in place adaption plans to combat the effects of climate change.

However for a number of reasons it is unlikely that such confidence could be justified.

In "Chapter 2: What are other countries doing", the Commission takes a cursory look at the emissions reductions steps proposed by other countries and unsurprisingly gives itself an out by the statement in Box 2.1 that "Lastly targets represent statements about countries' ambitions for the future, but these are not always matched by actions"

The Commission goes on, on page 5 to display the countries that have committed to net-zero emissions. China's net emissions target is set for 2060, but with the exception of South Africa, the rest are wealthy, stably governed countries with very limited population growth to 2050. They are major emitters of CO2 and are wealthy enough to take steps to meet their emissions targets.

There is a possibility that the USA will be added to this group, but even with that country included the remaining world population amounts to about 5 billion, with this number predicted to increase by a further 2 billion by 2050 (2) This grouping of 5-7 billion is not commented on by the Committee. While most are extremely low to moderate emitters, and so do not have the ability to reduce their emissions, many have a goal to decrease their poverty even if in doing it they have an increase in emissions.

A group of countries consisting of India and 10 other countries (3) have a combined population of about 2.3 billion (6). They have CO2 emissions of 2-5 tonnes per capita (4) in the same range as China had in 1995 before the transformation of its economy over the next 25 years (5). China's transformation was accompanied by a rise of CO2 emissions over this period from about 3 tonnes per capita to 8 tonnes per capita (7). It is likely that India and most of the other countries in this group will want to emulate China's transformation to at least a considerable extent with the energy required per capita going up accordingly. The major player in the group, India, plans to meet its increased electrical generation in part through untried Thorium nuclear power generation and pumped storage schemes (8). The

shortfall in either of these two approaches will have to be made up by the use of fossil fuels – with the choice to be made with fossil fuels declining in price due to reductions in demand by richer countries. The approach of the other 10 countries would also be affected by fossil fuel prices.

A further group of countries that will be influential in global emissions are the major oil producers (10) that are dependent on the revenue from oil and gas. Assuming that the rich countries succeed in greatly reducing consumption of oil and gas products the prices of these items will fall dramatically.

With a number of exceptions the remaining population of the world come from poor countries, some corrupt, others badly managed and others totally unstable. Their population is currently over 2 billion and will approach 4 billion by 2050. Their annual emissions per capita currently range from 0.1 to 2 tonnes per capita, so there is little scope for reducing emissions. It would seem probable that unless there is significant support from rich countries their energy needs of will be met from the cheapest source, which is almost certainly fossil fuels.

2.b Shortfall in advice on 5ZC.2.b.(viii), economic circumstances and the likely impact of the minister's decision on taxation, public spending and public borrowing

Despite the requirements of this section, there is no clear, comprehensive advice on the issues . This means that any economic issues raised in the Report have to be addressed piecemeal.

Items that require to be addressed.

- 1. There are many points raised within the report that require government action and will impinge on the economy but the impacts are not reported on.
 - a. Implementing the Commission's recommendations requires a very large increase in electricity generation and distribution. A reasonable assumption would be that the real costs of the new power would be higher than the real cost of current generation and distribution. This will raise the average real cost of electricity. There is no analysis of the economic effects of this.

5

- 2. Plan C appears to treat New Zealand as an isolated box independent of events in the rest of the world.
 - a. Plan C fixes on emissions rather than consumption as a the measure of our success in meeting emissions targets. This leads to "creative accounting" in targeting global emissions. Closing Tiwai Point smelter will help meet the emissions target for New Zealand but worsen it for the world. Tiwai point production will be replaced by Australian or Chinese smelters with power supplied by coal fired generation. Canada is part of the North America free trade area which is a net importer of Aluminium(9) Likewise methanol is a feedstock for plastic production, so closure of New Zealand's methanol plant would help reaching our emission's target but would have no impact on global emissions as the methanol would be produced elsewhere.
 - b. As cited in the previous section of this submission, there should be a large reduction in the international costs of oil. This will affect the economies of oil fuelled versus electric vehicles.
 - c. While vehicles are fuelled by both oil and electricity there will be a need for an electrical distribution system to be installed to fuel vehicles and this system together with an oil fuel distribution system to be maintained for an extended period. There is no economic appraisal of this in the Report.
 - d. In Chapter 9 the report compares the current costs of cars but does not provide its methodology in forming this comparison. It points to future reductions in the initial cost of electric cars but does not refer to reduction in costs of lower oil prices which would be inevitable if oil consumption was heavily reduced. This would affect any government costs for incentives for the change from oil to electric vehicles.
 - e. On page 15 of Chapter 9 the Commission makes the strange assumption that "the country's industries continue to produce at current levels" despite a median projected population increase of 700,000 by 2035 and 1.3 million by 2050. On page 18 meat and dairy production have not changed. Consumption of two of our primary exports would have gone up with increased population, so exports and foreign exchange earnings would go down. Closure of Tiwai point and the Methanol plant would further diminish our foreign exchange earnings. No analysis of this is included in the Report.
- 3. There is no report on foreign exchange issues and their economic consequences despite New Zealand being an international trading country
- 4. There is no assessment of the costs or timing of adapting to Climate Change

3. Approach and direction of Policy for New Zealand

The inherent problem in "Chapter 16: Our approach to Policy" is that it ignores what is happening outside New Zealand. By the time it comes for the Minister to set the next Emissions budget, the world economies will have changed dramatically from the time (even without the impact of Covid 19) of the signing of the Paris Accord. Even then it is unlikely that the intentions of much of the world will have been clearly stated. "Chapter: 17 The Direction of Policy for New Zealand" continues with a rather narrow focus on the dangers of Climate change. On Page 13 it refers to the possible dangers but does not quantify the costs of these risks. It goes on to quote recommendations on disclosures of Climate Change risk. Extrapolating this to other New Zealand risks would forestry companies disclose the risks of a Bay of Plenty eruption or forest fires, or Fonterra disclose the risk of a Mt Taranaki eruption, of major businesses in Wellington disclosing earthquake risk, or of Auckland of a volcanic eruption in the metropolitan area etc. Any of these would impose risks at least an order of magnitude greater than any of the Climate Change risks noted. Overall this Chapter includes many extra costs to be borne by the government or consumers and nothing citing economic measures or benefits to pay for them. It provides no path to earn needed foreign exchange and no clear path to providing an economy to cope with population increases of 700,00 by 2035 and 1.3 million by 2050.

4. Recommendations

After taking the above into consideration the Commission's draft advice to the Minister should have included,

- That meeting the Paris accord and Convention targets is outside New Zealand's control
- 2. That given the uncertainties in other countries' meeting their commitments New Zealand should assume that they may not be met and proceed with planning and timely execution of Adaption policies to protect the country against the effect of Climate change. The costs (and timing) of carrying out these policies should be estimated and considered when evaluating the effect of their costs on the economy.
- 3. The Commission should be required by the Minister to report on progress made by other countries on meeting their obligations under the Paris Accord since 2015 and review this annually to allow the Minister to make any appropriate adjustments to New Zealand climate change policy
- 4. Due to uncertainties in the real actions of parties to the accord rather than their targets New Zealand should take the minimum acceptable steps to meeting its obligations in setting the first emissions budget.
- 5. Given that the Covid 19 outbreak has largely stalled emissions increases for a year and that the pandemic has prompted climate change action in many countries for the same time, it would seem prudent for the commission to recommend to the Minister and Government that fixing the next Emissions Budget should be deferred for a year to have a clearer idea of Global progress.

5. A final point.

In any English language version of a document the name of this country is New Zealand. In this English version of the Report the Commission should refer to it by that name throughout.

References.

- 1. Trading economics. Crude Oil 1983-2021
- 2. World Population Clock
- 3. Algeria, Argentina, Brazil, Colombia, Indonesia, Morocco, Thailand, Turkey, Vietnam
- 4. Wikipedia. List of countries by CO2 per capita
- 5. Wikipedia. List of countries by CO2 per capita
- 6. World population Clock
- 7. Wikipedia. List of countries by CO2 per capita
- 8. Wikipedia. Electricity in India
- 9. Wikipedia. List of Countries by Aluminium production
- 10. Oil and Gas dependent nations. Russia, Saudi Arabia, Iraq,Iran,Kuwait, Qatar, Oman, UAE, Venezuela

A SUBMISSION TO THE CLIMATE CHANGE COMMISSION

#32

To be read in conjunction with my Response to the Climate Change Commission formal consultation;

Response ID. ANON-NZPP-DXU9-J Unique ID: 888401409

My Name is a limit of the limit

"Tungia te ururua kia tupu whakaritorito te tupu o te harakeke " Clear away the bad and the good will flourish.

"Kaua ma te waewae tutuki, engari ma te upoko pakaru " Persevere with determination, don't be put off by small obstacles.

I have completed the online questionnaire, largely supporting the Commission's approach but I do have some reservations as to the feasibility and affordability of some of the suggested solutions.

My submissions are to ask that you;

1. Recognise that your initial goals do not closely involved people in a progression of information, understanding, involvement and contribution towards the necessary behavioural modification of climate change responses. I struggle to see a successful national response unless the people can be involved in a concurrent behavioural change to support the process.

"Ki mai ki ahau, He aha te mea nui o tenei ao Maku e ki tau, He tangata, he tangata, he tangata."

If you were to ask me, What is the most important thing in the world? I would reply, it is people, it is people, it is people.

I was disappointed to see very little emphasis on the things that ordinary people want to decrease carbon fuel consumption or omissions. The most simple example would be vehicle sharing in cities with travel on facilitated lanes as already happens during rush-hour in some cities, but there are many ways that ordinary people can and should be involved right from the outset in the climate change response.

The commission notes that it wishes to see more electric vehicles on the roads but surely the converse also apply; less internal combustion engines and a dramatic increase

in passenger. Kilometres/litre of carbon -based fuel.

- 2. Consider the proportionality of the New Zealand response and compare it to trading partners and foreign powers, looking to measure benefits, costs and threats,
- 3. The commission have done well in their assessment of the need to start protecting the country from this threat but I was unable to find any account of an assessment of what would happen if the proposals fail, or even more dangerously, if the proposals succeed and make New Zealand an attractive takeover target.



12.03.21

#33



15th March 2021

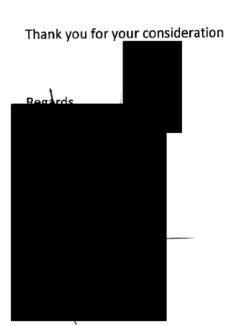
Submissions analysis team Climate Change Commission PO Box 24448 Wellington 6142

Submission to Climate Change commission on the unnecessary production of vehicle emissions due to the requirements of government policy and centralisation.

Attached please find a letter recently written to the Minister of Transport regarding the problems of vehicle testing as mandated by VTNZ and the unnecessary production of CO² as a result. While the letter indicates a real situation and outlines a specific problem account needs to be made of this to your commission with a view to changing government policy in a whole of country model looking at the cost of CO² when policy and departmental procedures are established. In general and when looking in from the outside the primary factor that seems to drive many of the policy decision made are primarily determined by financial accounting needs and more specifically, only local financial accounting needs (cost centres) where the whole picture and the total cost is often overlooked. One only needs to look at our prisons to see the best examples of this, cost reductions in health, welfare and education result in cost increases in justice and corrections. Overall nothing is saved and in this case much more is spent than needs to be as a result of silo cost centre accounting methods. So to it is with the management of aspects of our country's CO² emissions, and the lack of insight and oversight that seems to exist within the range of government services and policy settings.

As such I would submit to you that when you form policy that the policy must require accounting decisions to be made in respect of the total cost of CO² that will be produced as a result of any change that such actions or policy of any organisation will produce. The analysis must not just include the cost savings made to the particular organisation making the change but the downstream affect that will in all likelihood happen when those changes are then implemented by any person or organisation affected by that change. Further these changes must be measured after the change is implemented to ensure that the predictions made are correct and if they are not then corrective actions need to be put in place and implemented with a view to achieving improvement. One of the issues that I find concerning with local and to an extent central government is that goal and objectives may be set (not always well understood I might add by the implementers) but measurements and targets are not as often set and worse when they are they are rarely measured and even if that occurs there is little to no consequence in the event of failure. If anything the current systems promote failure by allowing competently questionable functionaries to hide behind the system and a lack of any real accountability (I can and will provide clear examples of this in local government if pressed). Thus when setting policy all of these points must be seriously considered, clearly spelt out and followed up, right up to and including consequences for failure which in turn must be effective.

Failure by central and local government to show real leadership in the manner described in my letter to the minister will not see citizens of this country accepting the real and major changes that are ahead if we are avert the looming crisis of climate change. Systems must be put in place that can and do hold leaders at all levels of society to account with both their successes and failures writ large for all to see, and more the cost to us all of those failures must also be presented so that a very clear picture of the way ahead can be presented in terms that people will understand.





15th March 2021

Hon Michael Wood Minister of Transport Care of Distribution Services Freepost Parliament Private Bag 18 888 Parliament Buildings Wellington 6160

Dear Hon Mr M Woods

AS minsters of transport I write to you to express concern as to the requirements of state and SOE's in respect of vehicle inspections and the contradiction that this imposes in respect of vehicle emissions and the consequential environmental impact of the production of unnecessary CO². This concern however is not limited to just the vehicle testing regime but could quite confidently be laid against any number of other government departments, SOE's and Quangos that affect the same policies or protocols onto the country and its citizens. The concern being that the imperative to save costs in any one person's budget increases disproportionally the costs to another, in many cases private individuals, but not always, although in every case the CO² load is far greater than it should be and yet I read and hear that we need to reduce our emissions profile. Someone seems to forget to tell accounting and why is that cost not part of their prevue?

To the problem and I shall provide an example for your reference. VTNZ by dint of regulation requires that vehicles and heavy vehicles in particular be subjected to a regular inspection and testing regime. That is fine and as it should be, however the process is run to suit VTNZ and no one else and in order to reduce their costs they disproportionally increase everyone else's along with their respective vehicle emissions. It would seem that the South Island has only one mobile brake testing vehicle for heavy vehicles covering the whole of the island with the result that it cannot visit every location and so only does a few and vehicles have to travel to where it is to be checked. In some cases these distances are considerable and as an aside if vehicles are deemed to be not up to standard at test point what risks are we subjecting other motorists to while this process is carried out, something else to ponder.

So the scenario I present to you is a real scenario to explain the high cost transference model and CO² overproduction in operation. Fire and Emergency have a number of vehicles located the length of the Westcoast and also has a contractor in place to service those vehicles. Part of the service contract involves them ensuring that each vehicle in the local fleet has a COF. The contractor is based In Hokitika and for now we will deal with just the South Westland area by way of example (the rest of NZ will be in a similar situation so this is not unique). VTNZ arranges for its testing vehicle to be based in Hari-Hari for South Westland inspections, the contractor needs to take vehicles from all

locations south and probably north back to this point so that is Whataroa, Franz Josef, Fox Glacier and Haast. The contractor drives to each location, picks up a vehicle, drives it back to Hari-Hari, then returns the vehicle, moving on to collect the next vehicle. Given the distances involved this takes some time (days) and worse produces many thousands of kilometres of unnecessary travel and CO². I should point out the obvious; Fire and Emergency are not the only organisation with heavy vehicles in South Westland and while the two unnecessary ferry trips required to get the appliance to the test centre would not be part of the emissions equation the distances travelled to get there by other vehicles being tested still occur. So to do the costs increase, there are road users charges, there are added and unnecessary fuel costs, there are extra vehicle running costs all of which have to be carried by the vehicle owners, and all of which are generally unproductive and as such wasted.

The retort may be that in the total scheme of things the excess is only a small added amount, but is this not the same reasons that are being cried down by government and environmental groups whenever any pressure interest group exclaims that our contribution to the global total of emissions is only fractional and of limited concern. It is not only necessary for government to be heard to lead, it must also be seen to lead and quite clearly it is not. Are not vehicle emissions New Zealand's second highest greenhouse gas emission problem? A whole of government approach is needed to get this problem sorted and tidied and I can cite numerous other examples where centralisation of services away from areas of public transport merely increases the cost and emissions required for individuals to attend these remote facilities. Take health, take the IRD, look at the closure of police stations and then outside of government there is the closure of banks and other services. Yes there are costs to be saved in one budget, but they are more than offset in other budgets while the CO² is never offset. I am sure government does not want to look at or acknowledge the high costs it transfers unnecessarily but now at this time in the global warming cycle ignoring this comes at a far higher cost than mere money.

It is time that we started to look at the wider unproductive costs associated with centralisation or the cutting back of services to suit the provider, especially where it has been mandated by government that such services must be used by individuals and business. Is it not time to also take into account when making decisions in respect of cost transference that the cost of the CO² emission profile is also taken into account and given a higher priority than it would seem that it is? I accept that this will require a major shift in attitude and approach from the many that have been brought up through a siloed approach to management from within government departments but it is one that needs to be made and directed from the top, your top minister. Government needs to implement and mandate an initiative that takes these added costs into account in policy settings and measures the effect of such changes. There was once a saying that may well apply to this situation, "If you look after the pennies the pounds will take care of themselves", it is not time to look after the pennies and the environment. There was a time when VTNZ carried out inspections from local garages throughout the country, maybe it is time that they implemented that policy again, that at least would help reduce CO² some more.

Yours sincerely

Copy to Hon James Shaw Minister for Climate change Copy to Hon Damien O'Connor MP for Westland Climate Change Commission, P.O. Box 24448, Wellington 6142.



23rd March, 2021.

Dear Dr Carr,

The Following is my submission to the Climate Commission.

I attach a graph of ppm of CO2 in the atmosphere depicted on the x-axis, and degrees change in Celsius on the y-axis. A logarithmic scale has been used due to the graph having to display a large number of CO2 parts per million.

From around pre-industrial times of approximately 350 ppm to the current level of about 420 ppm of CO2 in the atmosphere, shows an increase in temperature rise of 0.08 degrees Celsius. When CO2 reaches 1,000 ppm it can only rise to an increase of 3 degrees Celsius from 0 ppm. At 100,000 ppm it can only rise to 5 degrees Celsius and at 100,000,000 ppm it can only rise to 6 degrees Celsius. 1,000,000 ppm is an atmosphere containing 50% CO2.

Global temperatures between ice-ages and warm periods have fluctuated between 1 and 3 degrees Celsius increase and decrease. This falls within the band of 0 - 1,000 ppm of CO2 in the atmosphere. At one stage the Earth was at 7,000 ppm. There is no perceptible change in temperature between 1,000 ppm and 7,000 ppm due to its logarithmic scale. Mankind had no impact on these fluctuating levels on Earth in the past.

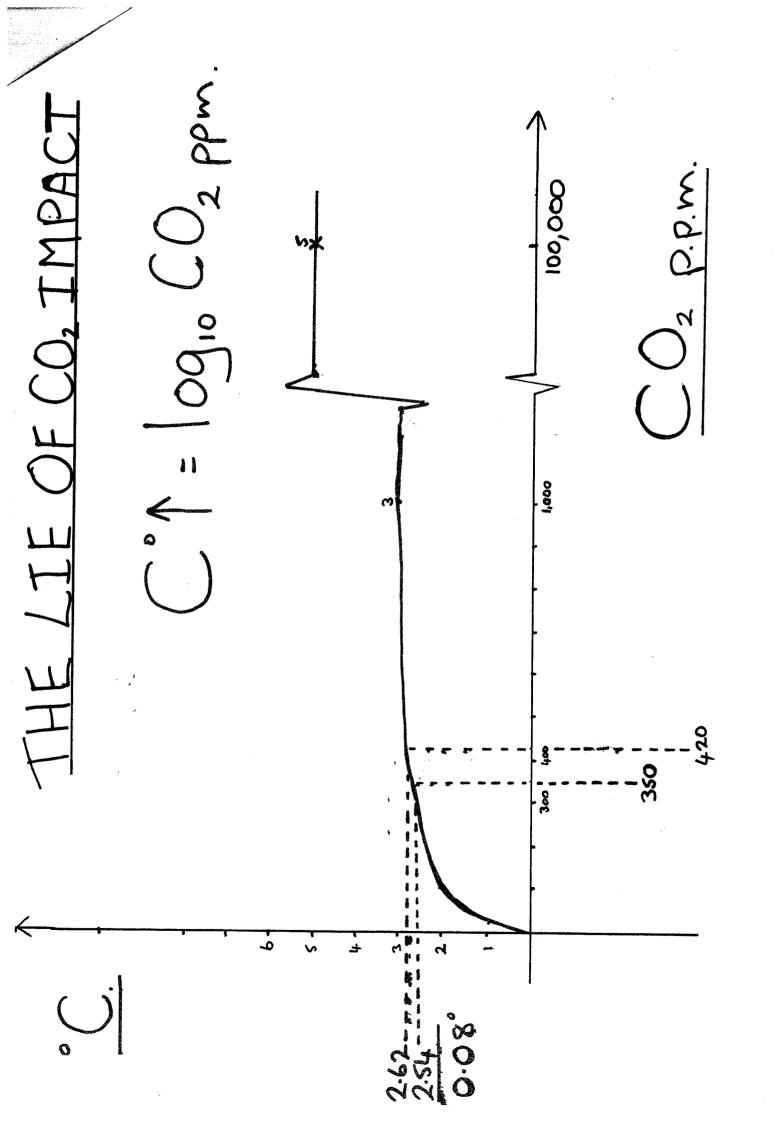
Anthropogenic impact on climate warming is infinitesimal. Without atmospheric CO2 above a level of about 175 ppm, life on Earth becomes extinct as we know it. Greenhouse farmers have pumped CO2 into their glasshouses for decades to increase the production of foods such as tomatoes. The increase in atmospheric CO2 has led to an increase in food production for the world's ever growing population. Ask any farmer in New Zealand and they will confirm this.

There are many cycles of the Sun influencing the Earth's climate. Russian Professor Valentina Zharkova has calculated a number of them. There are also periodic changes in the Earths rotational axis and its internal magnetism which also affect the Earth's climate.

Water vapour is the greatest greenhouse gas in the atmosphere. Sublimation and evaporation have a major impact on the Earth's climate.

The United Nations has pushed for taxation of carbon. That is where the concept originated. They have not done so in respect to water vapour, and I would suggest that is because it is too difficult. Taxing carbon has become a wealth re-distribution mechanism, penalising wealthy countries through guilt, and simply because they are perceived to be able to afford it.

If the Climate Commission recommends adopting the current draft report, without any costings being made public for scrutiny, it will be to the detriment of New Zealand's economy for many decades to come.



23rd March 2021

To all members of the Climate Commission

I am retired. I have a geophysics degree and a law degree. I have spent much of 2020 researching climate change. The issue is: The UN claims that humans are putting CO2 into the atmosphere and this is the major factor in global warming, sea level rise, and all the other disasters like floods, droughts, and wildfires.

There is absolutely no doubt this is a gigantic fraud. This is the biggest fraud the world has ever seen. Global warming and any other climate related phenomena are natural processes which we cannot control. Humans have a miniscule effect on climate. All these proposed changes to reduce CO2 emissions will have virtually no effect.

The people of NZ are still coping with covid. Many have lost their jobs. Many businesses have folded. Christchurch residents are still recovering from the earthquake. Many children there are still traumatised. So you want to impose more taxes, and severe restrictions. Many families will not be able to cope. The point is this is all for nothing. It is estimated that going down this path and abiding by the Paris climate agreement will cost the world some 100 TRILLION dollars for a temperature saving of just 1/6 of a degree C by 2100.

I need every member of the commission to read my submission. It is the culmination of many hours of work, so the time to read it is a drop in the bucket by comparison.

YOUR RECOMMENDATION TO THE GOVT. SHOULD BE THAT THEY DO NOTHING ABOUT CLIMATE. There is no emergency. Very slow natural processes are taking place. Humans have virtually no effect. We should just carry on as we are.

BSc (geophysics), LLB