

# Setting New Zealand's post-2020 climate change target

## Submission form

The Government is seeking views on New Zealand's post-2020 climate change contribution under the United Nations Framework Convention on Climate Change (UNFCCC).

You can have your say by making a submission using this form or using the online tool available at [www.mfe.govt.nz/more/consultations](http://www.mfe.govt.nz/more/consultations).

For more information about this consultation:

- Read our [Consultation on New Zealand's post-2020 international climate change contribution web page](#)
- Read our discussion document: [New Zealand's Climate Change Target: Our contribution to the new international climate change agreement](#)

**Submissions close at 5.00pm on Wednesday 3 June 2015.**

## Publishing and releasing submissions

All or part of any written submission (including names of submitters), may be published on the Ministry for the Environment's website [www.mfe.govt.nz](http://www.mfe.govt.nz). Unless you clearly specify otherwise in your submission, we will consider that you have consented to website posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions to this consultation under the Official Information Act.

The Privacy Act 1993 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this consultation. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

## Questions to guide your feedback

Your submission may address any aspect of the discussion document, but we would appreciate you paying particular attention to the questions posed throughout and listed in this form. You may answer some or all of the questions. To ensure your point of view is clearly understood, you should explain your rationale and provide supporting evidence where appropriate.

### Contact information

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### Objectives for the contribution

**1a. We have set the following three objectives for our contribution:**

- **it is seen as a fair and ambitious contribution – both by international and domestic audiences**
- **costs and impacts on society are managed appropriately**
- **it must guide New Zealand over the long term in the global transition to a low emissions world.**

**Do you agree with these objectives for our contribution?**

No

**1b. What is most important to you?**

Costs and impact on families and business

### What would be a fair contribution for New Zealand?

**2. What do you think the nature of New Zealand's emissions and economy means for the level of target that we set?**

Maintain emissions at current levels with no reduction

## How will our contribution affect New Zealanders?

### **3. What level of cost is appropriate for New Zealand to reduce its greenhouse gas emissions? For example, what do you think would be a reasonable impact on annual household consumption?**

Zero there must be no financial impact on NZers at all. Making NZers poorer will make them less able to afford new technologies such as the latest most fuel efficient cars, solar power, electric cars etc. The effect will be to do more harm than good. Market led technology improvement in to more efficient use of fossil fuel will be sufficient and will happen more as long as the government does not interfere and make us all poorer as it predicts its policy of reducing emissions will.

### **4. Of the opportunities for New Zealand to reduce its emissions (as outlined on page 15 of the discussion document), which do you think are the most likely to occur, or be most important for New Zealand?**

More efficient use of fossil fuel through market led technology. New cars are more fuel efficient than old cars. The more new cars we drive the less fuel we use BUT making people poorer through policy mechanisms like the ETS or taxing people to pay for international carbon credits will be counter productive because we will be less likely to drive newer cars.

Buying international units should not be considered because this will result in NZ taxpayers being taxed to fund renewable energy projects in other countries. Any benefits to the planet will be uncertain and insignificant enough to offset the imorality of a NZ taxpayer subsidising the business activities of international entrepreneurs.

NZers are concerned about Chinese and other foreigners having a financial advantage over us when it comes to buying our houses. It would be unthinkable that some might accreue this financial advantage from NZ taxpayers subsidising their business through the international carbon market.

Carbon units are not always produced from genuine reductions of carbon emissions.

Using forestry to reduce NZ emissions should also not be an option used by NZ because a significant percentage of carbon units generated by forestry are fraudulent and are not caused by the reduction of carbon from the atmosphere. When land is first planted in forest 45% of the soil carbon is lost. This equates to over one third of the carbon sequestered by the forest and because the NZ carbon accounting system does not recognise what happens to soil carbon one third of the carbon units generated are created from no net reduction in carbon from the atmosphere.

## Summary

### **5. How should New Zealand take into account the future uncertainties of technologies and costs when setting its target?**

NZ should only consider technologies which are proven to be effective. Too many mistakes have been made eg biofuel caused massive starvation and human misery, better to have a rising sea especially as it is not rising very fast.

## Other comments

### 6. Is there any further information you wish the Government to consider? Please explain.

The government should not take in to account any future possibility of reducing enteric methane when setting its target.

Additional comments by Robin Grieve Pastoral Farming Climate Research Inc

In addition to my submission on the submission form I provide the information to back up my submission that the Government should not take in to account any future possibility of reducing biological emissions when it sets its target.

Methane is a short lived gas and the IPCC itself warns against reducing such emissions because it will have only a limited effect on long term warming. (IPCC AR5 Synthesis Report)

Professor Ralph Sims a professor of sustainable energy at Massey University, who Chairs an IPCC working Group, warns that we should forget about trying to reduce methane and focus on CO2 because that is where the problem is. Reducing methane will not address the problem of global warming.

The IPCC is effectively saying that the Government should stop wasting tax payer money on trying to reduce methane emissions;

Whilst the IPCC argument is that methane reduction will have a limited affect, I submit that pursuing ways to reduce methane emissions will actually cause an increase in global warming. The IPCC's concern is that if countries focus on reducing their greenhouse gas emissions of methane in order to meet global commitments they will most likely be doing so at the expense of efforts to make genuine reductions in CO2 emissions which are the only real culprit. The effect of this is they will cause more warming than if they didn't focus on reducing methane emissions, because they will have not reduced CO2 emissions.

Apart from the IPCC concerns there are many more concerns and reasons not to set a target that anticipates being able to reduce methane emissions, in particular enteric methane (from a ruminant).

Keith Lassey, Principle Scientist Atmospheric services NIWA states that "No scientific link exists between the emission of enteric methane and the concentration of methane in the atmosphere."

This is of paramount importance because the definition of an anthropogenic emission under UNFCCC definitions is that it is an emission that alters the composition of the atmosphere.

The theory of global warming is that increased emissions of greenhouse gas have caused the atmospheric concentration of greenhouse gas to increase which is causing warming. So for an

emission of greenhouse gas to be causing warming it has to increase the atmospheric concentration of a greenhouse gas. Enteric methane emissions from a steady state of production do not. This is not disputed by any climate scientist.

There are two reasons why enteric methane produced in a steady state do not alter the composition of the atmosphere. Firstly methane is a short lived gas and is broken down to CO<sub>2</sub> and H<sub>2</sub>O within 8 to 12 years. Secondly enteric methane is a biological emission that is part of the carbon cycle so when examining the effect of the emission one must examine the effect in the context of the whole carbon cycle. The CO<sub>2</sub> that enteric methane breaks down to over 8 to 12 years is sourced from the atmosphere not under the ground so it has no net effect on CO<sub>2</sub> concentrations and neither does it have any net

effect on methane concentrations because a state in which methane is constantly produced from the atmosphere and constantly oxidised in the atmosphere is neutral. The atmospheric concentration of methane does not increase.

At last report 34.9% of NZ's emissions are attributed to enteric methane and do not alter the composition of the atmosphere. Our effective emissions are overstated by 34.9%. The emissions they calculate and attribute to enteric methane are not of methane but CO<sub>2</sub> e and that is the problem NZ has got itself in to by being part of this.

The Government when formulating policy speaks of carbon emissions not methane emissions and this is the problem. Carbon is a theoretical unit calculated using politically negotiated parameters to compare the effect of different emissions of different greenhouse gases in an effort to be able to quantify them all using one standardised unit. The metric 'Global Warming Potential' is used and this is problematic because the metric is unsatisfactory in accurately doing this and this is acknowledged by the UNFCCC, the IPCC and many others. In 2009 the IPCC set up an expert working group to examine other metrics to see if any could nullify the concerns they have over the inaccuracies created by the use of GWP. They were not able to find a better metric so we continue to use an unsatisfactory metric (GWP) to calculate the value of carbon in methane emissions.

The three points the IPCC expert working group make are

*1 Global Warming Potential (GWP) is a well-defined metric based on radiative forcing that continues to be useful in a multi-gas approach. Shortcomings have been identified; however the scientific basis has not been fully established to address these shortcomings comprehensively in any currently discussed metric;*

*2. The effectiveness of the use of a given metric depends on the primary policy goal, for example to limit the long term temperature change, limit rates of change, avoid particular impacts, and balance costs and benefits. The GWP was not designed with a particular policy goal in mind. Depending on the specific policy goal or goals, alternative metrics may be preferable;*

This means that they conclude that GWP is not the best metric for all policy making situations yet it is the only metric used by our Government for all policy goals, adding weight to my allegation that there is very little scientific integrity in the 'carbon unit' which is the basis of NZ climate policy.

*3. The GWP with the time horizon of 100 years is used in the Kyoto Protocol. The numerical value of the GWP can depend markedly on the choice of time horizon. The choice of any particular time horizon involves value judgments in terms of future commitment to radiative forcing;*

Similar to the second point they are saying that various time horizons could and should be used for different situations but the NZ government only uses 100 years. This means they lack integrity again. With most of our emissions not of CO<sub>2</sub> and therefore subject to the vagaries of a GWP to determine the quantity of CARBON supposedly produced by them and because this quantity could vary significantly with the stroke of a pen changing the time horizon used they are not an honest reflection of an activities true effect on the atmospheric concentration of any greenhouse gas and subsequently global warming.

The reason the IPCC could not resolve the problem of finding a metric is that methane and CO<sub>2</sub> are so different they are not comparable and no metric will be satisfactory. Livestock emissions of methane only constitute 34.9 % of our emission profile of the theoretical unit politicians refer to as 'carbon' as a result of a carbon accounting system which is inherently flawed because it attempts to standardise the effects of greenhouse gases which cannot and should not be standardised.

This is because the emission of biological methane gas from a steady state of production will do no more than maintain current levels of atmospheric methane WHEREAS the emission of fossil sourced CO<sub>2</sub> from a steady state of production will INCREASE the atmospheric concentration of CO<sub>2</sub>. Therefore the effect of the two gases cannot be compared to each other unless the outcome to atmospheric concentrations of each gas is considered. The current metric GWP does not do this, instead it compares the effect each gas has on radiative forcing over various time horizons. How much warming each gas creates over a given time frame is not relevant to the issue of the increasing concentration of greenhouse gas, and therefore not relevant to the issue of global warming which is the only issue we should be concerned about.

As previously submitted the IPCC is concerned that countries will reduce methane emissions instead of CO<sub>2</sub> emissions and the reason for this problem is the use of the theoretical carbon unit and the GWP metric. It is particularly concerning that the current political treatment of these emissions can lead people to conclude that it is ok to drive a big car and produce emissions of carbon from the use of fossil fuel because they can offset them by not eating meat one day a week. These people are basing this belief on the relative emissions of carbon as calculated by our Government but the reality is that the emissions from their big car will alter the composition of the atmosphere whereas the emissions produced by the meat will most probably have no impact at all. By reducing the intake of meat to save the planet these people will more than likely increase warming because they are not reducing CO<sub>2</sub> emissions.

It is not unreasonable to assume that an increase in livestock emissions would cause a one off increase in the concentration of atmospheric methane but the treatment of enteric methane by the

UNFCCC and our Government does not distinguish between emissions produced as a result of an increase in livestock emissions and those from a steady state. Most NZ emissions of enteric methane are from a steady state.

While we question the validity of carbon dioxide equivalents for the reasons I have stated, there are also questions around the GWP values themselves. As well as this there seems little understanding of methane sources and sinks and the expected impact they have and will have.

There is huge uncertainty in the GWP metric used to calculate the CO<sub>2</sub>e's attributed to methane, there are tremendous uncertainties about methane sources and sinks and their effects. Atmospheric concentration of methane was relatively stable for no apparent attributable reason demonstrating just how little scientists know about methane.

The IPCC warns against countries reducing methane emissions and with the sole point and purpose of the entire global warming policy response being to slow or stop global warming caused by the increasing concentration of greenhouse gas the only focus needs to be on slowing or stopping activities which do that. Enteric methane from a steady state of production does not.

The Government should stop wasting money trying to reduce emissions of enteric methane and not take in to account any future possibility of doing so when setting its target emissions post 2020, which should be no reduction.

The two follies are trying to reduce enteric methane and putting in place an emission target that will require us to send money offshore that will decrease our wealth and increase the wealth of private off shore businesses. Reducing our wealth will make us less able to adopt new technologies which are more fuel efficient thereby having completely the opposite effect and result in higher emissions than if the Government did nothing.

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## When your submission is complete

Email your completed submission to [climate.contribution@mfe.govt.nz](mailto:climate.contribution@mfe.govt.nz) or post to Climate Change Contribution Consultation, Ministry for the Environment, PO Box 10362, Wellington 6143.

**Submissions close at 5.00pm on Wednesday 3 June 2015.**